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ABSTRACT

The 1974-75 annual report of the University Grants Commission (UGC), New Delhi, India, is presented. Contents pertain to: institutions and enrollment in higher education; approach to fifth plan development of universities and colleges; development of universities; development of colleges; students; faculty improvement programs; cultural exchange programs and international collaboration; support for research; and maintenance and coordination of standards. The Commission took various measures to regulate expansion of students, particularly at the undergraduate stage. The expansion of higher education for 1974-75 was 5.9 percent as compared to 12-14 percent during the sixties. The amended UGC Act, effective June 17, 1972, has helped to bring about restraint in the establishment of new universities and colleges. In 1974-75, 85 new colleges were established as compared to 152 new colleges established during 1973-74. The Commission is taking steps to strengthen science teaching in undergraduate colleges and to revise the syllabi. (SW)

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UNIVERSITY GRANTS COMMISSION

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REPORT FOR THE YEAR

1974-75

HE009449

Presented to the Government of India in compliance with Section 18 of the UGC Act, 1956 as amended upto June 17, 1972

NEW DELHI

University Grants Commission
New Delhi - 110002
(INDIA)

NOTE

Figures given in the report have been rounded

1 lakh = 1,00,000

1 crore = 1,00,00,000 = 10 million

July 1976.

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UNIVERSITY GRANTS COMMISSION

ANNUAL REPORT

APRIL 1974—MARCH 1975

In compliance with Section 18 of the UGC Act, 56 (No. 3 of 56) as amended upto June 17, 1972, we have the honour to present to the Central Government the Annual Report of the University Grants Commission for the year 1974-75 to be laid before both the houses of Parliament.

INTRODUCTION

Despite disturbances and agitations by students in different parts of the country during 1974-75 which put considerable strain on the system, the Commission tried to raise standards by providing assistance to the universities and the colleges for general development. It also worked out special programmes for restructuring higher education and making it more relevant to national needs.

I. *Expansion of Higher Education*

The Commission took various measures to regulate expansion of students, particularly at the undergraduate stage. The expansion of higher education during the year under review was 5.9 percent as compared to 12-14 percent during the Sixties. (Appendix III). The decline may be attributed in part to the growth of avenues of non-formal education (correspondence courses, private study etc.), in part to the economic situation, and in part to the reduction in some of the states of the three-year undergraduate courses to two-year undergraduate courses, by taking away the first year of the three-year degree course and adding it to the two-year higher secondary course. The speedy introduction of the 10 + 2 system is thus necessary for curbing, on a long term basis, unplanned expansion of education.

The amended UGC Act which came into force with effect from 17th June 1972 has helped to bring about restraint in the establishment of new universities and new colleges. Under Section 12(A) of the UGC amended Act, no university so established after 17th June 1972 can receive assistance from the Central Government or from any other organisation receiving

Central Government funds unless the Commission has declared such institutions to be fit to receive central assistance. During the year under review, seven new universities were established, viz. Acharya Navendra Deva University of Agriculture and Technology (Faizabad), Avadh University (Faizabad), Bidhan Chandra Krishi Visvavidyalaya (Kalyani), Bundelkhand University (Jhansi), Chandrasekhar Azad University of Agriculture and Technology (Kanpur), University of Hyderabad, Rohilkhand University (Bareilly). In 1974-75, 85 new colleges were established as against 152 new colleges established during the year 1973-74. Of these Colleges, only 45 were Arts, Science and Commerce Colleges, while there were 12 Law Colleges. The remainder were professional colleges, including colleges of Oriental Learning.

Faculty-wise distribution

While there has been a welcome increase in percentage of post-graduate enrolment from 9.0 in 1972-73 to 9.9 in 1974-75, the percentage of students in the science faculty has declined from 22.8 in 1972-73 to 19.6 in 1974-75. To counter this trend the Commission is taking steps to strengthen science teaching in undergraduate colleges and to revise the syllabi in order to make them more relevant.

II. *Pattern of Assistance to Universities*

The Commission issued detailed guidelines to the universities for submitting plans to the Commission for their development. Bearing in mind the constraint of resources, they were asked to send their plans in three priorities, I, II & III to represent the first 50%, the next 25% and the remaining 25% of the ceiling indicated to them. The Commission generally agreed that during the V Plan period it would utilise about 2/3rd of the allocation for general development programmes of the universities and colleges and the balance for special programmes to be initiated by the UGC on a selective basis. About 1/3rd of the amount proposed for the universities and colleges could be earmarked for the general development of colleges. The funds were therefore to be distributed broadly as follows :—

(a)	General development of universities and colleges	Rs. 140 crores
	(i) General development of universities	Rs. 95 to 100 crores
	(ii) General development of colleges	Rs. 45 to 40 crores
(b)	Development of special programmes and research	Rs. 70 crores

The Commission noted that this was exclusive of funds for Engineering and Technology.

The Commission decided that while accepting the schemes of the Universities, Visiting Committees should broadly conform to the limits indicated below :

(a)	Building	25% of total allocation
(b)	Staff	27%
(c)	Equipment	20%
(d)	Books	20%
(e)	Miscellaneous	8%

The Commission has since considered and taken decisions on the reports of most of the Visiting Committees. It has been possible to accord approval of the programmes to the extent of only 2/3 rd of the total allocations in view of the limited resources at the disposal of the Commission.

III. *Development of Undergraduate Education in Colleges*

For the majority of students seeking university level education, the first degree is the terminal stage, and it is therefore important that the first degree courses offered, by and large, in the affiliated colleges, should be adequately strengthened, diversified and made relevant to the fast changing needs of the society. The diversification of courses should be related to local, regional and national needs, utilisation of the natural resources and relating them to employment opportunities.

For their general developmental needs, the Commission has asked colleges to send proposals within a ceiling of assistance of Rs. 5 lakhs from the Commission. The assistance for different items in the plan may broadly conform to the limits indicated below :

Building	upto 1/3rd of the total outlay
Faculty Improvement and additional staff	not less than 1/6th of the total outlay
Books and Equipment	upto 50 per cent of the total outlay

Construction of buildings should be so planned that they provide for more functional areas required for classrooms, laboratories and libraries and construction costs should be kept down by use of local materials as far as possible. Academic buildings are provided for on a 50 per cent matching share by the Commission, but in the case of backward regions, the Com-

mission provides 2/3rd assistance. In case of workshop and animal houses, the Commission provides assistance on a 100 per cent basis.

In addition to the above, a number of special programmes such as the College Science Improvement Programme and College Humanities and Social Science Improvement Programme for undergradute students have been continued and expanded by the Commission.

Separate programmes for the development of postgraduate colleges and for giving autonomous status to existing colleges have been worked out and guidelines issued.

IV. *Student Welfare and help to Weaker Sections*

The Commission continued to provide for non-resident student centres and canteens, study centres and health centres which were a spill-over from the IV Plan. The Commission gives high priority for the construction of hostels for the students in universities and colleges. The Commission's assistance for construction of hostels to universities and colleges has been on a sharing basis. The Commission is providing 50% in the case of Men's hostels and 75% in the case of women's hostels. The Commission has stipulated that 20% of the seats in hostels built with the assistance of the Commission would be reserved for scheduled caste/scheduled tribe students.

The Commission has continued the programme of Students' Aid Fund to help poor and needy students. It has considerably strengthened the Book Bank Scheme. During 1974-75, a sum of over Rs. 58 lakhs was paid to 592 colleges for the purpose.

The Commission continues to provide junior and senior research fellowship to help academically bright students to carry on their research as a full time activity. The value of the junior fellowship has been raised from Rs. 300 per month to Rs. 400 per month for the first two years and Rs. 500 per month thereafter for another two years after the work of the fellow has been assessed and found satisfactory. The contingent grant has been raised from Rs. 1000 to Rs. 1500. The value of senior research fellowship has been revised from Rs. 500 to Rs. 600. The number of senior fellowships awarded every year has been raised from 60 to 100, and the contingent grant for books etc. from Rs. 1000 to Rs. 2000.

Ten per cent of the fellowships are reserved for scheduled caste/scheduled tribe candidates. The Commission also provides 15 junior scholarships and fellowships to students from the Hill areas of the North

Eastern Region and Ladakh. The scholarships and fellowships are being extended to cover students from other Hill areas.

The Commission provides separate research fellowship for engineering and technology.

The Commission has also agreed to the institutions of 10 junior and five senior research fellowships for foreign students from among developing countries for undertaking research work at the Indian universities.

In addition to the above, the Commission has sanctioned 3400 junior research fellowships in science and humanities to universities. On the basis of the recommendations of the Visiting Committee, nearly 300 more junior fellowships are being provided for the Plan period.

The Commission continued to give assistance to universities and coleges for the development of play fields and purchase of accessories for games and sports. It has also encouraged students to take part in the National Service Scheme.

V. *Maintenance and Coordination of Standards*

The University Grants Commission has taken a number of important steps for the maintenance and coordination of standards of teaching, research and examinations which is one of its statutory responsibilities. Pay scales of university and college teachers and minimum qualifications of teachers have been revised on the basis of the recommendations of the Sen Committee. The recommendations of the Commission have been forwarded to the Union Ministry of Education for implementation by the States. The new pay scales and the higher qualifications for teacher laid down are aimed at raising the social status of the teachers and particularly attracting people of a better calibre into the teaching profession.

A number of programmes of training and orientation of existing teachers have been undertaken through programmes of summer institutes and seminars, teacher fellowships, associateships etc.

Attempts have been made to introduce reforms in the existing system of examinations, emphasising continuous internal evaluation, semester system, question banks and grades in place of numerical marks. Initially 12 universities were selected for initiating examination reforms. The various issues involved in reforms were discussed at four zonal workshops held at Madurai, Ahmedabad, Chandigarh and Bhubaneswar. These workshops created greater awareness in the universities of the need for

undertaking measures of examination reforms. The Commission also appointed an Implementation Committee to advise the Commission on the progress in examination reforms. On the basis of these efforts, 33 universities had introduced internal assessment with a minimum weightage of 20%. Question banks have been introduced in a number of universities. Intensive efforts for the introduction of grading system are planned to be undertaken in the year 1975-76.

The New Pattern of Education

The Commission has under consideration measures to implement in the universities the 10+2+3 pattern as suggested in the National Policy on Education and endorsed by the Central Advisory Board of Education. The Commission endorsed the view that a three year course at the undergraduate level should be the norm, but in view of special conditions, where a university desired to have a two year pass course following 10+2, it could do so. A three years honours course would be the pre-requisite for admission to master courses. However, adequate provision of suitable 'bridge' or 'link' courses should be made for the graduates who wish to pursue postgraduate studies. Colleges where honours course can be provided should be carefully selected on the basis of facilities and standards maintained by them.

VI. *Curriculum Development and Restructuring of Courses*

In February 1974, the Commission constituted Panels in various university disciplines or groups of disciplines in the Humanities and Social Sciences, Natural Sciences and Technology to advise the Commission on matters relating to the development of teaching and research in their respective areas. The Panels normally meet two to three times annually and have reviewed the undergraduate and postgraduate courses offered at present in the universities and colleges. There is a consensus that the courses need to be thoroughly revised and upgraded.

In their meetings held in September-October, 1974, the Panels in Social Sciences and Humanities suggested that regional workshops may be organised at different university centres in the country to suggest measures for upgrading and modernising the syllabus and for bringing it nearer to the needs of the society and students. The Commission has accepted this recommendation and the panels have started preparatory work for these workshops. It is expected that as a result of the deliberations of the workshops planned for 1975-76, concrete recommendations and guidelines will be available for developing curriculum in various disciplines.

On the basiss of recommendations of various bi-national conferences. revision of science syllabi, are under the consideration of Science Panels.

VII. *Rural Orientation, Vocational Courses and Career Advisory Bureaux*

The University Grants Commission has been considering, for some time past, the question of the restructuring of university courses at the first degree level so as to make them relevant to the rural environment and to the developmental needs of the community and, with this end in view, to give a practical or field orientation also. The Commission is of the view that special attention needs to be given to the orientation of the existing courses towards rural problems, without creating a completely different channel for such studies.

The Commission, with the help of an expert committee, has formulated a set of guidelines for the introduction of such courses of study. The Commission has also selected 18 universities on a regional basis to take lead in regard to the restructuring of courses and to act as pace-setters in this important area of educational reforms and innovation.

The courses are to be reoriented in such a manner that a student can apply his theoretical knowledge to the problems of the region through field work, project work, extension, etc. In other words the existing conventional courses may be integrated with concrete problems and the courses related to the development of the region.

The scheme has essentially to be implemented within the existing resources of the university/college but the UGC would support the programme by providing assistance for the purchase of equipment, setting up of workshops and laboratories, pilot plants etc. and for the purchase of books and journals and appointment of extra staff on the merit of each proposal.

The Commission is not in favour of vocationalising higher education since it considers that the fundamental purpose of higher education is the training of a critical faculty and the grasp of concepts at a high level. The Commission has however provided assistance to a number of universities for instituting part-time vocational courses to provide intermediate level skills geared to employment opportunities. The duration and the length of these courses will have to vary with the job opportunities available in various regions.

The Commission is also reviewing employment information-cum-advisory bureaux in association with the Directorate General of Employ-

ment and Training with a view to ensuring better career advising in the universities.

VIII. *Support for Research*

Universities are uniquely equipped to be the main focus of research and training activities in the country. Bearing in mind that different universities are in different stages of growth and development for teaching and research, the Commission aims to strengthen their research activities, with the object of establishing viable research schools capable of continuous and sustained research for purposes of training as well as for solving problems of scientific, technological and regional or national relevance (R & D).

The Commission has taken a number of steps to strengthen research in the universities. Besides providing for projectbased research support to individual research workers, groups of research workers and also departmental support for research, the University Grants Commission would provide during the V Plan period, a core support for research to every university to encourage research and create research interest in every university department.

In order to encourage and support university science research, Science Panels have been set up with representatives of universities as well as various national agencies active in the field of science research. These Panels, consisting of experts in different disciplines within the subject, have evaluated the status of development of each of these subjects and facilities available for advanced study and research and in the background of this general as well as department-wise information consider specified research programmes received from the universities. The Science Research Council coordinates multi-disciplinary as well as R&D oriented research in relation to prime areas identified by the National Committee on Science and Technology. Efforts are being made to establish interphases between the university system on the one hand and the specialised R&D Laboratories, user industries etc., on the other.

Proposals for seeking support for their research programmes were invited from the universities and colleges during 1974-75 and onwards. Appendix XIII gives information in relation to the total number of proposals received so far, their present status of consideration and number of proposals accepted for support in science subjects. In addition to these major research projects being supported, the Commission, during 1974-75, accepted 275 minor research projects. The number of active projects in process is 800.

With a view to promoting advanced study and research in the humanities and social sciences, the University Grants Commission is providing financial assistance to university and college teachers for research or learned work in their respective fields of specialisation. Research on inter-disciplinary basis and research areas which have remained relatively neglected but which are of crucial importance to the social and economic life of the country receive priority.

Assistance from the Commission is available for short-term projects which could be completed in a year or two as well as for advanced research which may take longer. The number of projects, short-term and advanced level, in social sciences and humanities, which have been approved by the Commission during 1974-75 are indicated in Appendix XIV. The number of active projects in process is over 900.

IX. *Centres of Advanced Study and Departments of Special Assistance*

In addition to providing support for individual or group research projects, the Commission has been providing major support for integrated departmental research programmes in a few selected departments in each subject. The programme of Centres of Advanced Study and Special Assistance to selected departments initiated by the University Grants Commission in 1963-64 and 1972-73 respectively, provide funds for supporting research programmes as well as collaborative effort between such identified departments and other universities, national laboratories, R & D institutions, etc. In addition, they provide for facilities for advanced training in chosen disciplines. With the help of expert committees, programmes in existing centres of advanced study have been carefully reviewed. The Commission has decided to discontinue the programme in a few Centres of Advanced Study. In the case of those whose work has been rated as excellent, it has been decided to provide continued assistance in the V Plan to strengthen their teaching and research programmes.

In 1972 the Commission initiated a programme of special assistance to selected departments to help them in strengthening and consolidating their teaching and research programmes and to identify an area of specialisation in which they would ultimately strive to achieve excellence.

It has been decided that assistance to these departments may be made available upto the end of the V Plan period provided the state governments agree to take over the recurring liability after the end of the V plan period. The work of the departments would also be assessed prior to the end of this period.

It was also decided to extend the programme to other selected departments with the help of expert committees and subject panels.

X. *Development of Centralised Facilities for Research and R & D Work*

Advanced training and research programmes in universities and colleges demand adequate facilities of general and sophisticated instrumentation, workshop and library services. While it should be expected that each institution should develop such facilities, realisation of this objective is not easy owing to a number of limiting factors, such as, non-availability of such equipment in adequate numbers and of sufficient quality and performance from indigenous manufacturing sources, inadequacy of foreign exchange resources for import of such equipment from other countries and inadequacy of back-up maintenance services. The availability of financial resources and economics of maximum utilisation of such equipment and other services have also to be kept in view.

The Commission has provided assistance on a 100% basis to universities and colleges for the development of workshop facilities. In addition, it has initiated action to develop a few regional centres of instrumentation for use by a number of institutions within the region. These regional instrumentation centres, adequately equipped and staffed, and properly maintained could take up some or all of the following activities :

(i) Servicing and maintenance activities
(ii) Service facilities
(iii) Instrumentation Development work

It is proposed that during the Fifth Plan period, upto six such regional instrumentation centres may be established in appropriate locations. These regional centres would have essential inter-faces with the local industries, R & D institutions and the regional offices of the Central Scientific Instruments Organisation of the CSIR. Efforts are also being made to develop these centres in coordination with the Department of Science and Technology, Government of India.

XI. Non-formal and Continuing Education

The new strategy of regulating numbers visualises that roughly 50% of the students should be streamed off into non-formal channels such as correspondence courses and self-study. In order to maintain standards, the Commission, after careful andd etailed deliberations, has laid down certain guidelines regarding the manner in which such courses should be started at the undergraduate and postgraduate levels. Broadly speaking, the Commi-

ssion visualises that not more than one university should be permitted to start correspondence courses in one state though smaller states could be grouped together and in bigger states more than one university could be permitted to undertake correspondence courses. Cooperation between different universities in a state in preparing lessons, or taking part in contact programmes would be highly desirable.

Secondly, correspondence courses should be started only in those universities or well-established colleges which have strong teaching and research departments. The Commission has emphasised provision for contact classes, extra-mural lectures, library facilities etc. for the students enrolled in correspondence classes. Such facilities could also be provided to private students by colleges.

In order that the universities play their due role in the programmes of recurrent or continuing education and to integrate the universities closely with the community, the Commission has set up a committee on Continuing and Adult Education. Programmes of continuing education have been initiated and are continuing in 10 universities.

XII. Other Programmes

The Commission continues to provide funds for publication of learned works and theses. It has provided funds to universities for the development of computer facilities and science education centres on a regional basis.

Cultural Exchange programmes with various countries providing for inter-change of faculty, Commonwealth Academic Staff Fellowship scheme etc. have continued to be supported by the Commission to provide for inter-change of ideas. A few universities have been selected as focal points of collaborative research in universities and research institutions abroad.

In order that there may be a better understanding and appreciation of the problems of various countries in the world, particularly developing countries and countries in our neighbourhood, the Commission provides assistance to universities for developing programmes of Area Studies.

It will thus be seen that during the year 1974-75 the main emphasis of the University Grants Commission has been on consolidation including regulation of numbers, quality, restructuring of courses in order to make them more relevant for national needs, and providing special facilities in the field of higher education to the weaker sections and less developed regions of the country.

SECTION I

Institutions and Enrolment in Higher Education
Growth in Numbers

Against 2,37,688 students in 30 universities and 824 colleges in 1953-54 there were 23,66,541 students in 102 universities, 9 institutions deemed to be universities and 4388 colleges in 1974-75. The following table indicates the growth of numbers during the years 1953-54, 1962-63, 1967-68 and 1970-71 to 1974-75. The figures for student enrolment given in the earlier UGC annual reports included enrolment in intermediate classes and pre-university. It has now been decided that figures relating to student enrolment will henceforth exclude enrolment in intermediate classes, pre-university and pre-professional courses, unless otherwise specified.

Year	*Number of Universities*	*Number of Colleges*	*Number of Students*
1953-54	30	824	2,37,688
1962-63	54+5 institutions deemed to be universities	1938	7,52,095
1967-68	70+8 institutions deemed to be universities	2899	13,70,261
1970-71	85+8 institutions deemed to be universities	3604	19,53,700
1971-72	91+8 institutions deemed to be universities	3896	20,65,041
1972-73	94+9 institutions deemed to be universities	4158	21,68,107
1973-74	95+9 institutions deemed to be universities	4308	22,34,385
1974-75	102+9 institutions deemed to be universities	4388	23,66,541

A chronological list of universities with their student enrolment and number of colleges according to courses of study during the period 1970-71 to 1974-75 is given in Appendices I and II respectively. Appendix III gives student enrolment for the years 1960-61 to 1974-75.

During the year under review, 7 new universities were established viz., Acharya Narendra Dev University of Agriculture and Technology, Avadh University, Bidhan Chandra Krishi Viswavidyalaya, Bundelkhand University, Chandra Sekhar Azad University of Agriculture and Technology, University of Hyderabad and Rohilkhand University.

In 1974-75 only 85 new colleges were established as against 152 new colleges established during 1973-74. Forty six of these new colleges were arts, science and commerce colleges and 12 were law colleges. The distribution of new professional colleges is as under : Education 12, Medicine, Pharmacy Ayurveda, Nursing and Dentistry 9, Physical Education, Music and Fine Arts 4, and Agriculture 2. There was an increase of 292 colleges between 1970-71 and 1971-72, 262 colleges between 1971-72 and 1972-73, 150 colleges between 1972-73 and 1973-74 and 80 colleges between 1973-74 and1974-75.

During the years 1961-62 to 1969-70 the university level enrolment increased by roughly 12 to 14 per cent per annum. The growth rate dropped to 9.0 per cent in 1970-71, to 5.7 per cent in 1971-72, 5.0 per cent in 1972-73 and 3.1 per cent in 1973-74, but again increased to 5.9 per cent in 1974-75. The increase in total enrolment over the preceding year and the percentage increase in the number of students from 1960-61 to 1974-75 are given in Appendix III.

The drop in the growth rate of enrolment can be attributed partly to the provision of correspondence courses and partly to the fact that more and more universities are now permitting students to appear as private candidates or external students in university examinations.

According to stage-wise student enrolment from 1972-73 to 1974-75 given in Appendix IV, postgraduate enrolment as a percentage of total enrolment increased from 9.0 per cent in 1972-73 to 9.6 per cent in 1973-74 and 9.9 per cent in 1974-75. This increase is to be welcomed as it shows that relatively more students are now taking to specialised courses at the postgraduate level.

Appendix V gives the stage-wise enrolment in university departments/ university colleges and affiliated colleges. The affiliated colleges account for 85.1 per cent of the total enrolment in the universities and colleges. Percentage of students in the affiliated colleges is as high as 90.1 in undergraduate courses. The affiliated colleges also account for 51.3 per cent of the enrolment at the postgraduate level and 10.9 per cent of research enrolment.

The faculty-wise distribution of student enrolment from 1972-73 to 1974-75 given in Appendix VI shows that the percentage enrolment in the faculty of arts (including oriental learning) to the total enrolment went up from 44.4 in 1972-73 to 44.9 in 1973-74 but was 44.6 in 1974-75. Enrolment in commerce increased from 14.7 per cent in 1972-73 to 16.5 per cent in 1974-75 and the enrolment in Law from 4.6 per cent in 1972-73 to 5.7 per cent in 1974-75. On the other hand, enrolment in the professional

faculties did not show any appreciable increase while enrolment in science declined from 22.8 per cent in 1972-73 to 19.6 per cent in 1974-75. The faculties of Arts, Science and Commerce account for 80.7 per cent of the total enrolment in higher education.

In 1974-75, there were 27,820 teachers in the university departments and university colleges. Of them, 2,803 were professors, 5,141 readers, 17,700 lecturers and 2,186 demonstrators. Teaching staff in the university departments and university colleges increased in 1974-75 by 1,17(over the preceding year.

The staff in the affiliated colleges totalled 1,33,952 in 1974-75 including 16,396 senior teachers, 1,03,456 lecturers and 14,100 tutors/demonstrators. There was an increase of approximately 4,000 teachers in the affiliated colleges in 1974-75 over the year 1973-74. The distribution of staff in the university departments and affiliated colleges is given in Appendices VII and VIII respectively. The tables show that there was a marginal increase in the proportion of professors and readers in the university departments/ colleges as also in the proportion of senior teachers in the affiliated colleges.

It will be seen from the above account that the guidelines formulated by the Commission to regulate expansion particularly at the undergraduate stage have started yielding good dividends. As regards establishment of new universities, the amended UGC Act which came into force with effect from 17th June, 1972 has helped to bring about restraint in respect of establishment of new universities and new colleges. Under Section 12A of the amended UGC Act no university established after 17th June, 1972 can receive assistance from the Central Government or Commission or any other organisation receiving assistance from the Central Government funds unless the Commission has declared such institutions fit to receive Central assistance.

SECTION II

Approach to Fifth Plan Development of Universities and Colleges

The Commission is anxious to ensure that its support to universities during the Fifth Plan period is used primarily for consolidating and improving the quality of teaching, research and extension. The constraint of resources is a limiting factor and this has to be kept in view by the universities in fixing their priorities and planning their programmes.

During the close of the Fourth Plan period, the Commission appointed a Planning Group to determine priorities and programmes for the Fifth Plan in relation to the requirements of higher education, national development and social change. The guidelines formulated by the Commission on the basis of the recommendations of the Planning Group are summarised below :—

(a) Financial resources for higher education during the Fifth Plan period will be limited. When resources are small, one has to think hard and identify development needs with very great care. Development needs thus identified may be classified according to priorities I, II & III to represent the first 50 per cent, the next 25 per cent and the remaining 25 per cent respectively.

(b) In preparing programmes for the Fifth Plan period beginning 1st April 1974 the university may keep in view the need of bringing to successful completion the programmes already initiated during the Fourth Plan period or earlier. These programmes and the grants to be paid for their completion after 1st April 1974 will be taken as the first charge on the Fifth Plan allocation for university development programmes.

(c) In case of building programmes approved during the Fourth Plan period, but whose construction work has not been started, the universities may review the position and decide whether such building activities should be included within the Fifth Plan allocations.

(d) There will have to be considerable restraints on expansion of enrolment in formal and full time courses, particularly at the undergraduate stage. Demands for expansion in enrolment at this level will have to be met substantially through part-time, own-time, correspondence courses or extended or evening classes programmes.

(e) Each university may prepare a comprehensive plan of development to cover the programmes of the university departments and of its postgraduate centres, if any.

(f) Programmes for higher education to be taken up by the universities may be classified into two categories :—

(*a*) programmes of which the universities would be required to formulate detailed proposals and (*b*) programmes relating to certain schemes which the University Grants Commission may initiate in the universities on a selective basis.

The former category would broadly include proposals for (i) development of existing university departments of teaching and research, (ii) introduction of new specialisation or areas of study in the existing departments and establishment of new departments, (iii) programmes of reform, such as modernisation of courses, specific orientation to research activities, etc. (iv) library facilities and services, (v) workshop facilities and other central maintenance facilities, (vi) general amenities for students and staff such as, hostels, residential quarters, students' study centres, etc., and (vii) health centres.

Programmes which the UGC would initiate on a selective basis include schemes such as, (1) college science/humanities improvement programme, (2) autonomous colleges, (3) examination reform, (4) fellowships, (5) grants for support to individual groups and departmental research programmes, (6) area studies, (7) adult and continuing education and (9) teacher education etc.

(g) The universities should outline what steps they plan to take with regard to examination reform (along the lines of the brochure *Examination Reform — A Plan of Action* circulated to them).

(h) The universities should take a positive attitude to giving a greater measure of autonomy to university departments with regard to syllabi, courses of study, assessment and examinations.

(i) Consolidation would imply, *inter alia*, participation in various faculty improvement programmes initiated by the Commission or by the universities themselves. Universities may encourage their staff to make maximum use of the programmes.

(j) The universities may try to develop appropriate extension programmes like part-time education in science subjects for industrial

workers in their neighbourhood either as evening or as correspondence courses. These would have to be in collaboration with the industry concerned.

(k) Postgraduate teaching should be consolidated as far as possible in university departments or at postgraduate centres set up by the university, or through a coordinated programme by groups of colleges, rather than allowing individual colleges to start sub-viable postgraduate departments. The universities may assess the needs for fresh postgraduate seats and facilities for the Fifth Plan period, and indicate an outline of a plan of how they propose to meet these needs.

(l) Efforts should be made to develop pre-Ph.D. course programme so as to make the training of Ph.D.'s broad based. Post M.A. and M.Sc. courses of regional relevance may also be introduced.

(m) Efforts may be made to develop collaborative and inter-disciplinary programmes of courses and research involving several departments, e.g., programmes in area studies, biological sciences, earth sciences, law and social change, development studies in relation to science and technology and social sciences, environment and ecology etc.

(n) In making proposals for new postgraduate departments or centres, priority should be given to projects which try to develop new types of postgraduate teaching and research programmes, particularly those related to national and regional developmental needs rather than traditional M.A./M.Sc. courses. Wherever possible, advantage may be taken of special local conditions in organising such programmes; e.g., proximity to certain industries or to laboratories set up by the CSIR, Indian Space Research Organisation, Atomic Energy Commission and noted science research institutes in various parts of the country.

(o) Efforts may be made towards removal of regional imbalance, creating opportunities for higher education for under-privileged sections of society and for under-developed areas in each region. These could be in the form of special supplementary programmes and courses to help students from scheduled castes and tribes and other under-privileged communities to enable them overcome their initial handicaps. The universities may give special attention to the structure and contents of courses of colleges located in rural areas. Academic centres may be established in the big cities with

large concentration of colleges to meet the needs of undergraduate colleges. Such a centre, imaginatively conceived and organised could prove a catalytic agent in enriching the quality of teaching, learning and examinations in the undergraduate colleges.

(p) Apart from development courses outlined above, some universities may try to develop new types of combination courses in the sciences, the humanities and the social sciences at the undergraduate level, where the student takes some courses in the humanities area (economics, social sciences, philosophy, human affairs, fine arts and literature, etc.) and some in the sciences (not just in physics, chemistry, etc. but new courses relating to development of scientific ideas, scientific method and attitude, science and the problem of economic development and science policy, ecology, human environment, impact of science and technology on society etc.) some of which he may study in depth.

The Commission at its meeting held on May 7, 1974 took the following decisions with regard to the programmes of development to be undertaken during the Fifth Plan period and funds to be allocated to each of the programmes :

(1) Basis of Allocation

The Commission had generally agreed that during the Fifth Plan period the UGC would utilise about 2/3rd of the allocation for general development programmes of the universities and colleges and the balance for special programmes to be initiated by the UGC on a selective basis. About 1/3rd of the amount proposed for the universities and colleges could be earmarked for the general development of colleges. The details regarding the programmes that would be included in each of these sectors is given below :—

(a) General development of universities and colleges	Rs. 140 crores
(i) General development of universities	Rs. 95 to 100 crores
(ii) General development of colleges	Rs. 45 to 40 crores
(b) Development of special programmes and research	Rs. 70 crores

Programmes to be covered under the general development of universities that may be assisted with these allocations would include the following :—

(2) *General Development of Universities : Rs. 95 to 100 crores*

A. Development programes of all faculties except engineering and technology, agriculture, and medicine as recommended by the Visiting Committees. These would broadly cover additional teaching and technical staff, scientific equipment (for general laboratory facilities primarily) and academic buildings.

B. Library facilities for central and departmental libraries.

C. General facilities such as hostels, staff quarters, teachers' hostels, central instrumentation and workshop facilities, guest houses and printing presses etc.

D. University centres for postgraduate studies (Items as indicated at A, B and C above).

E. Faculty improvement.

F. Student welfare programmes.

G. Unassigned grants.

H. Campus development of central universities.

I. New universities (central & state) and new postgraduate centres.

J. Teacher education.

Of the Rs. 95 crores to 100 crores suggested for general development of universities, the following provisions were indicated for specific purposes

to be kept out of the purview of the recommendations of the visiting committee :—

Student welfare programmes	Rs. 1 crore
Unassigned grant	Rs. 1 crore
Campus development of Central universities	Rs. 1 crore
New universities (central & state) and new postgraduate centres	Rs. 10 crores
Teacher education	Rs. 3 croers

Allocation for Development of Colleges : Rs. 45 to 40 crores

1.	Development of undergraduate education in metropolitan cities of Delhi, Calcutta, Bombay and Madras	Rs. 6 crores
2.	Development of postgraduate colleges (including faculty improvement of the college staff)	Rs. 10 crores
3.	Student welfare programmes	Rs. 3 crores
4.	Teacher education	Rs. 1 crore
5.	Development of undergraduate education in affiliated colleges (except those in metropolitan cities)	Rs. 25 to 20 crores

The specific allocation of Rs. 6 crores, for development of colleges in metropolitan cities, would be used as given below :

(i) Delhi colleges	Rs. 2 crores
(ii) Calcutta colleges	Rs. 2 crores
(iii) Bombay colleges	Rs. 1 crore
(iv) Madras colleges	Rs. 1 crore

Allocation for Special Programmes Sector

The following is the allocation for the special programmes sector for which a sum of Rs. 70 crores has been included in the likely total out-lay of Rs. 210 crores.

	Rs. in crores
(a) Research grants (Science Research and Humanities Research Councils, Science and Humanities Panels) (b) Centres of Advanced Study and Departments of Special Assistance	29.0
(c) COSIP/COHSIP and autonomous colleges	10.0
(d) Research fellowships	7.5
(e) Faculty improvement schemes	2.5
(f) Faculty awards	2.0
(g) Computer facilities	5 0
(h) Regional library centres	2.0
(i) Regional instrumentation facilities	2.0
(j) Restructuring of courses and examination reform	4.0
(k) Needs arising out of international collaboration schemes	3.0
(l) Correspondence courses	1.0
(m) New programmes to be initiated on the advice of Panels/SRC/other Standing Committees	1.0
(n) Miscellaneous programmes	1.0
Total	70.0

(3) Pattern of Assistance

A. UNIVERSITIES

It would be useful to see that assistance for different inputs broadly conform to the limits indicated below while accepting development schemes of universities.

(a) Buildings*	25% of total allocation
(b) Staff	27%
(c) Equipment	20%
(d) Books	20%
(e) Miscellaneous	8%

* In case of established universities the distribution of expenditure on items (b), (c) and (d) could vary, if necessary.

B. POSTGRADUATE COLLEGES

The broad distribution of grants on major items for development of postgraduate education in affiliated colleges may be the same as for the universities and as indicated above. The expenditure on staff in post-graduate colleges should be so arranged that about 50 per cent is utilised for the appointment of additional staff and the remaining 50 per cent is utilised for faculty improvement programmes.

C. COLLEGES

In the case of colleges, the assistance for different items in the plan may broadly conform to the limits indicated below :

Building	1/3rd
Faculty improvement and additional staff	1/6th
Books and equipment	1/2

The implementation of the Fifth Five Year Plan programmes in the universities and colleges and the assessment of the Visiting Committees are generally to conform to the guidelines formulated by the Planning Group and accepted by the Commission, as outlined above.

SECTION III

Development of Universities

Generally speaking, the development programmes of the universities during the first year of the Fifth Plan period fall into three broad categories. Firstly, there are ongoing programmes accepted by the Commission in the earlier plans for the development of universities which include assistance towards additional teaching and technical staff, scientific equipment, books and journals and academic buildings. These also include facilities like hostels and staff quarters and the development of postgraduate centres. Secondly, in 1974-75 the Commission allocated basic grants to the universities to enable them to meet their immediate requirements for books and equipments. The allocation of basic grants was necessitated by the fact that assessment by visiting committees inevitably takes time and the requirements of universities for the purchase of books and journals and equipment are of an urgent nature. Thirdly, the strategy for the development of universities during the Fifth Plan period, keeping in view the likely availability of resources, was finalised by the Commission and Visiting Committees were sent out to the universities for assessing their Fifth Plan requirements.

(i) Non-Plan and Plan

A statement of grants paid to the universities for a period of 5 years ending 1973-74 was given in the Annual Report of the UGC for 1973-74. A break-up of grants paid during 1974-75 in respect of both plan and non-plan expenditure, is given below :

Amount in Rupees

I. NON-PLAN PROJECTS	
A. Administration charges	58,69,142
B. Block grant to Central Universities	12,00,00,000
C. (i) Maintenance grants to Constituent/ Affiliated Colleges of Delhi University	4,64,03,939
(ii) Revision of Pay Scales and additional D.A. to Academic/Non-Academic Staff	1,53,13,500
D. Schemes not covered under Block grant (Revision of Pay Scales and additional D.A. to Academic & Non-Academic staff of Central Universities.)	3,14,23,864
Total Section-A Non-Plan	21,90,10,445

Amount in Rupees

II. PLAN PROJECTS	
A. Grants to Central and State Universities for Humanities	3,26,38,249 *1,52,766
B. Grants to Central and State Universities for Science	5,98,82,916 *10,24,423
C. Grants to Central and State Universities for Engineeing & Technology	2,70,93,402 *8,652
D. Grants to Constituent/Affiliated Colleges	3,81,06,966 *9,331
E. Grants to Central and State Universities for Miscellaneous Schemes	8,97,40,594 *7,87,837
F. Miscellaneous Expenditure	16,17,432 *5,522
Total Section-II Plan Projects	24,90,79,550 *19,88,531
Total Section — I & II	46,80,89,995 *19,88,531

* Expenditure by Adjustment of grants sanctioned in previous year.

(ii) Non-Plan Grants to Central Universities

During the year under review, the five Central universities received maintenance (Non-Plan) grants of Rs. 12,00,00,000 as under :—

1. Aligarh Muslim University	3,25,00,000
2. Banaras Hindu University	4,45,00,000
3. Delhi University	2,25,00,000
4. Jawaharlal Nehru University	1,13,00,000
5. Visva-Bharati	92,00,000
Total	12,00,00,000

The North Eastern Hill University at Shillong was established by a Central Act during 1973-74 and a grant of Rs. 10.50 lakhs during 1973-74 and Rs. 50 lakhs during 1974-75 was paid to it under 'Plan' for meeting its recurring and non-recurring expenditure.

The University of Hyderabad was established by an Act of Parliament in August 1974. The Act came into force from 2nd October 1974. The University took the possession of land for the campus and constituted a committee for campus development. Working groups were constituted for drafting the programmes of work of different Schools on the recommendations made by the Planning Board. During the period under review grants amounting to Rs. 10 lakhs were paid to the University from Plan funds.

The pay scales of academic and non-academic staff of the Central Universities were revised with effect from 1-1-1973 consequent upon the acceptance of the Sen Committee Report by the Government of India and the recommendations made by the Third Pay Commission. The Commission paid the following grants to the Central Universities for revision of pay scales and additional dearness allowances during 1974-75.

S.No.	*Name of University*	*Amount in Rupees*
1.	Aligarh Muslim University	92,95,012
2.	Banaras Hindu University	84,02,052
3.	Delhi University	99,84,800
4.	Jawaharlal Nehru University	16,67,000
5.	Visva-Bharati	20,75,000
	Total	3,14,23,864

During 1974-75, grants were also paid under Plan in respect of the medical colleges of Aligarh Muslim University (Rs. 13,43,496), Banaras Hindu University (13,60,936) and Delhi University—College of Medical Sciences (Rs. 6,50,000). In addition to the above, grants were paid for the development of hospitals attached to the medical colleges or Institutes of Medical Sciences as detailed below :—

A. Non-Recurring Expenditure (Plan) on buildings, equipment, books etc., for Hospitals attached to Medical Colleges

Aligarh Muslim University	Rs. 7,83,497
Banaras Hindu University	Rs. 51,20,897
Total	Rs. 59,04,394

B. Recurring Expenditure (Plan) and Development of Hospitals attached to Medical Colleges during 1974-75

Banaras Hindu University	Rs. 6,00,900
Total	Rs. 6,00,900

For projects relating to campus development grants amounting to Rs. 17,66,471 were paid during the year to the Central Universities.

(*iii*) *Grants for Plan Projects*

The University Grants Commission continued to provide financial assistance to the universities and university centres for postgraduate studies during 1974-75 on account of the plan amount payable to them on the basis of the actual expenditure incurred by them for the period ending 1973-74 against Fourth Plan allocations and other ongoing programmes e.g. students' aid fund, study centres, unassigned grants etc.

In anticipation of the recommendations of the various committees, the Commission also allocated to the universities basic grants for the purchase of books and journals, scientific equipments and for certain other projects to enable them to meet their immediate requirements for 1974-75 and 1975-76. The grants were to be utilised for (a) honouring commitments already entered into during Fourth Plan period for which payments could not be made in the Fourth Plan and (b) immediate requirements for library books and journals and scientific equipments upto the time further grants are made on the basis of the recommendations of the Visiting Committees. The basic grants would be treated as the first charge on the Fifth Plan allocations of the universities concerned.

The basic grants allocated to 70 universities and six institutions deemed to be universities amounted to Rs. 242 lakhs for purchase of books and journals and Rs. 363 lakhs for purchase of scientific equipments. Details are given in Appendix IX.

The following grants were paid to the universities and institutions deemed to be universities during 1973-74 and 1974-75.

Purpose	*1973-74*	*1974-75*
	Amount in lakhs Rs.	
Science Departments	473.97	609.07
Humanities & Social Sciences	293.75	327.91
Engineering & Technology	194.98	271.02
Miscellaneous Schemes*	769.86	905.28
Total	1,732.56	2,113.28

*Includes provision for residential accommodation for staff and students, library books, amenities for students, scholarships, fellowships etc.

The above table shows that compared to the expenditure incurred during 1973-74, there was an increase of Rs. 380.72 lakhs in expenditure during 1974-75. This, however, does not mean that plan allocations were not utilised to that extent during the Fourth Plan period as bills amounting to Rs. 383.74 lakhs on account of expenditure incurred during 1973-74 were paid in 1974-75 owing to financial stringency.

(*iv*) *Grants for Development of Sciences*

During 1974-75, the Commission paid grants totalling Rs. 458.34 lakhs to the universities for the development of science education and research. The assistance given to the universities for this purpose during 1973-74 is also given below for purposes of comparison.

(*Rs. in lakhs*)

Items of Expenditure	*1973-74*	*%*	*1974-75*	*%*
(i) Staff	125.93	27	59.81	14
(ii) Equipment	186.76	40	174.97	39
(iii) Books & Journals	23.38	5	54.54	12
(iv) Buildings	66.43	14	80.15	17
(v) Centres of Advanced Study	42.55	9	50.07	10
(vi) Special Assistance to selected departments	21.96	4	36.41	7
(vii) Other schemes	6.96	1	2.39	1
Total	473.97	100	458.34	100

It will be seen from the above table that as a proportion of total expenditure on science education and research in 1974-75, the maximum amount was spent on equipment, buildings, books and journals, for the reason that these items were allowed to be carried over as spill-over in so far as commitments were made in the Fourth Plan period. On the other hand, the expenditure on staff and other items was reimbursed to the universities only to the extent of the actual expenditure during the Fourth Plan period, after which according to the guidelines this was treated as committed expenditure.

Computer Development

The Commission has appointed an Expert Committee to examine the question of development of computer facilities in the universities during the Fifth Plan period. The proposals received from the universities were examined by this committee and the committee suggested that expert committees may be appointed to visit different universities to examine their computer requirements. In the case of two universities, the committee had recommended that instead of providing a computer the needs of the universities could be met by providing some grant for purchase of computer time from other centres. These recommendations were accepted by the Commission. Committees are likely to visit Annamalai, Bangalore, Banaras, Baroda, Bombay, Dibrugarh, Gauhati, Jammu, Lucknow, Kerala, Mysore, Panjab, Poona and Ranchi Universities.

The Commission accepted the recommendations of the Department of Electronics for establishment of the Regional Computer Centre at Jadavpur University, Calcutta, and agreed to provide its share of the grant of Rs. 17 lakhs for this purpose. This centre would be jointly funded by the UGC, West Bengal Government and the Depatrment of Electronics, Government of India.

Collaboration with USSR — Centre of Exploration Geophysics, Osmania University

Under the Indo-USSR agreement of economic and technical collaboration, the Centre of Exploration Geophysics was established in Osmania University during 1969-70. This involved a total expenditure of Rs. 88.40 lakhs over a period of five years. The first phase of this project was over in 1974 and an expert committee was appointed to examine the progress made during this period. On the basis of the recommendations of this committee, the Commission agreed to provide further assistance of Rs. 5 lakhs p.a. and non-recurring grant of Rs. 10,000 to the Centre for the Fifth Plan period. This is in addition to the balance of funds available from the earlier allocation of Rs. 88.40 lakhs.

Hari Om Ashram Trust Awards : 1974

The Commission has instituted four awards to be awarded every year out of the endowment of Rs. 6 lakhs placed at the disposal of the Commission by the Hari Om Ashram Trust, Nadiad. The selections for these awards for 1974 were made with the help of Jury appointed for this purpose and following teachers have been selected for these awards :

(1) Sir C.V. Raman award for research in Physical Sciences— Dr. R.R. Daniel, Tata Institute of Fundamental Research, Bombay, for his contribution to Cosmic Rays particularly High Energy Cosmic Ray Electrons and inferences made on some properties of the Galaxy.

(2) Homi J. Bhabha Award for research in Applied Sciences — Professor T.R. Anantharaman, Deptt. of Metallurgical Engineering, Banaras Hindu University, Varanasi — for his contribution in the areas of Physical Metallurgy and organising school of research in that subject at Banaras Hindu University.

(3) Meghnad Saha Award for research in Theoretical Sciences : Professor S.K. Joshi, Deptt. of Physics, Roorkee University, Roorkee, for his contribution in the fields of Theoretical/Solid State Physics.

(4) Jagdish Chandra Bose Award for research in Life Sciences : (i) Prof. A.K. Sharma and Dr. (Mrs.) Archana Sharma, Deptt. of Botany, Calcutta University, Calcutta for contributions to research and teaching in Cytology and Cytogenetics. (ii) Prof. G.N. Ramachandran, Molecular Biophysics Unit, Indian Institute of Science, Bangalore — for his contribution in the field of Molecular Biophysics.

Foreign Exchange/Import Licence

The Commission continued to assist the universities and colleges in the procurement of scientific equipment, rare chemicals and library books and journals from abroad by obtaining necessary foreign exchange and import licences from the concerned authorites.

During the year 1974-75, the utilisation of foreign exchange by the educational institutions far exceeded the allocation made by the Government of India to the UGC for the purpose and the excess was made good by the Government of India through special allotment.

During 1974-75, foreign exchange was utilised by the educational institutions as indicated below :—

(Rupees in lakhs)

	Free	*Credit*	*Rupee*
1974-75	26.71	16.25	11.30

The Commission also purchased UNESCO coupons worth Rs. 5,07,799.97 equivalent to $ 62,112.23. UNESCO coupons worth Rs. 3,75,992.68 equivalent to $ 48,074.62 were issued to the universities and colleges for the purchase of scientific equipment/chemicals to meet their immediate requirements.

During the year 1974-75, the Government of India's policy regarding release of foreign exchange for replacements, spare parts etc., continued to be restrictive and only in very special cases, foreign exchange for the import of additional or new items of equipment could be obtained by the UGC for the educational institutions.

(v) *Grants for the Development of Humanities and Social Sciences*

The pattern of development in the Humanities and Social Science departments in the universities continued to be guided by the plans and programmes already approved by the Commission in respect of different universities. Grants paid to the universities for the development of humanities and social sciences during the years 1973-74 and 1974-75 are indicated below :—

(Rs. in lakhs)

Items of Expenditure	*1973-74*	*%*	*1974-75*	*%*
(i) Staff	128.40	44	76.10	32
(ii) Equipment	6.61	2	7.80	4
(iii) Books & Journals	80.11	27	80.48	34
(iv) Buildings	40.17	14	42.21	18
(v) Centres of Advanced Study	25.55	9	13.82	6
(vi) Special Assistance to Selected Deptts.	0.82		4.07	2
(vii) Area Studies programme	5.56	2	3.11	1
(viii) Teachers Training Programme	6.53	2	8.42	3
Total	293.75	100	236.01	100

Much significance need not be attached to the proportion of expenditure incurred on various heads of assistance for the development of humanities and social sciences departments. As already reported in the UGC Annual Report for 1973-74, there have been year to year variations in this regard.

(*vi*) *Development Grants for Engineering and Technology*

Assistance provided by the Commission to the universities for the development of Engineering and Technology during 1973-74 and 1974-75 is indicated below :

(*Rs. in lakhs*)

	Items of Expenditure	*1973-74*	*%*	*1974-75*	*%*
(i)	Staff and maintenance	47.05	24	47.34	18
(ii)	Buildings	32.67	17	38.02	14
(iii)	Books & Journals	12.13	6	18.33	7
(iv)	Equipment	70.88	37	95.86	35
(v)	Fellowships & Scholarships	31.95	16	69.68	26
(vi)	Miscellaneous Schemes	0.30	—	0.25	—
	Total	194.98	100	269.48	100

The expenditure on equipment (35 per cent), fellowships and scholarships* (26 per cent), and staff (18 per cent) account for a significant portion of the total expenditure on the development of Engg. & Technology during 1974-75. Expenditure on books and journals in 1973-74 and 1974-75 remained low because the universities lifted the greater part of their basic grant for this purpose in the first two years of the Fourth Plan period.

Postgraduate Scholarships and Fellowships

The Commission has raised the value of Postgraduate Scholarship in Engineering and Technology from Rs. 250 p.m. to Rs. 400 p.m. for a period of 24 months and Research Fellowship from Rs. 400 p.m. to Rs. 500 p.m. for two years, and subsequently to Rs. 600 p.m. after academic assessment for a further period of two years, with effect from 1.7.74. During 1974-75, the Commission agreed to provide 1,279 postgraduate scholarships to 22 universities/institutions in various postgraduate courses in Engineering/

* The increase in expenditure is due to enhancement in the value of the fellowships and scholarships, as detailed in the following paragraph.

Technology. The total number of research fellowships in Engineering/ Technology during the period was 107.

Enhancement of Annual Maintenance Grant from Rs. 500 to Rs. 1,000 per student for P.G. Courses in Engineering & Technology including Pharmacy

On the recommendations of the AICTE Board of Postgraduate Engineering Studies and Research, the Commission enhanced the annual maintenance grant from Rs. 500 to Rs. 1,000 per student for postgraduate courses in Engineering & Technology with effect from 1.4.1973, especially towards project work to be undertaken by the postgraduate students.

Basic Grant for Purchase of Equipment and Books

Pending assessment of the overall requirements of universities in Engineering and Technology by the UGC/AICTE Visiting Committees, the Commission has allocated basic grants to the universities for the purchase of equipment and books in Engineering and Technology to the tune of Rs. 39.25 lakhs for books to 22 universities/institutions to be adjusted against the Fifth Plan grants which may be approved by the Commission on the recommendations of the Visiting Committees.

Introduction of Business Administration Course in the Universities

The committed expenditure on Business Administration Courses during the Fifth Five Year Plan period is of the order of Rs. 32.44 lakhs (Rs. 16.00 lakhs for recurring and Rs. 16.44 lakhs for non-recurring expenditure) pertaining to 13 universities.

The UGC appointed a committee to suggest university departments which may be permitted to start postgraduate course in Business Administration. The committee recommended that assistance may be provided to universities keeping in view the facilities for management courses already available, the area of the State and the development of industry and other relevant factors.

Development of Undergraduate Courses in Engineering and Technology

A joint UGC/AICTE Committee has been set up to formulate guidelines for inviting proposals from universities for consolidation and strengthening of various courses in Engineering/Technology during the Fifth Plan period within the available resources.

(vii) Fifth Plan Proposals of Universities

During 1974-75, the Commission invited proposals for the development of university teaching departments and postgraduate centres from 72 universities and Six institutions deemed to be universities within a ceiling of Rs. 101.25 crores allocated for the purpose. The universities were requested to formulate their proposals in the light of guidelines sent to them as detailed in Section II of the report. It was emphasised that in the current plan, the main effort should be on consolidation, strengthening and proper orientation of the existing departments of universities and on bringing about considerable constraint of expansion in formal and full-time education particularly at the undergraduate level.

The Commission advised all State Governments to set-up an Inter University Coordination Board so as to make the best use of facilities and expertise available for coordinated development of the academic programmes of the various universities in each State. Such bodies will consist of Vice-Chancellors of the different universities, representatives of the State Government and the UGC.

Each University has also been advised to set up a planning board which would engage in a continuous review of the implementation of the various academic programmes in the universities and suggest measures for making these programmes relevant to the local needs.

The Commission has also advised the universities, in view of the limited resources available to it, to explore the possibility of obtaining funds from LIC, HUDCO, State Housing Corporation etc., for construction of residential buildings.

Each university will be required to send to the Commission annually a detailed report indicating the progress made in the implementation of the Fifth Plan programmes. Appointments will be made by the universities through open advertisement in respect of the posts sanctioned by the Commission.

During 1974-75, Visiting Committees constituted by the UGC to assess the Fifth Plan development needs and requirements of the universities, visited the following universities/institutions deemed to be universities and postgraduate centres.

Name of the University	*Name of the Postgraduate Centre*
Andhra	Guntur
Berhampur	
Bombay	Goa
Calicut	
Cochin	
Delhi	
Dibrugarh	
Gauhati	
Gujarat	
Guru Nanak Dev	
Himachal Pradesh	
Jamia Millia Islamia	
Jammu	
Jawaharlal Nehru	Imphal
Kalyani	
Kashmir	
Kerala	
Kurukshetra	
Marathwada	
Maharaja Sayajirao	
Nagpur	
Osmania	Warangal
Panjab	Rohtak
Punjabi	
Poona	
Rabindra Bharati	
Sambalpur	
Sardar Patel	
Shivaji	
SNDT Women's	
South Gujarat	
Sri Venkateswara	Anantpur
Tata Institute of Social Sciences	
Utkal	

The Commission has since considered and taken decisions on the reports of most of the Visiting Committees.

It has been possible to accord approval of the programmes to the extent of only 2/3rd of the total allocations in view of the limited resources at the disposal of the Commission. However, the non-recurring and recurring items included in the accepted Fifth Plan programmes will both be taken up for implementation simultaneously by the universities.

The pattern of assistance to the universities in the Fifth Plan is given in Appendix X.

SECTION IV

Development of Colleges

The financial resources for higher education during the Fifth Plan period will be limited. It is therefore essential that the development needs of the colleges affiliated to the universities are identified with great care so that the limited resources available can be utilised by such institutions and for such programmes as are likely to make an appreciable impact on improvement of standards through modernisation and rationalisation as well as diversification of undergraduate programmes of education in Humanities, Social Sciences, Sciences, Commerce, etc. in the colleges.

For the majority of students seeking university level education, the first degree is the terminal stage, and it is therefore important that the first degree courses offered, by and large, in the affiliated colleges, should be adequately strengthened, diversified and made relevant to the fast changing needs of the society. The diversification of courses should be related to local, regional and national needs, utilization of the natural resources and relating them to employment opportunities.

Preparation of Development Proposals for Improvement of Undergraduate Education — Guidelines

The Commission accepted the recommendations of the planning group regarding development programmes to be undertaken in affiliated colleges at the undergraduate level. During the year under review, the Commission devoted considerable attention to the formulation of guidelines to be sent to the colleges for preparing their development proposals for the improvement of undergraduate education in the Fifth five year plan period. The essential features of these guidelines are summarised below :

(a) Generally for the purposes of assistance from the University Grants Commission, the first degree courses offered by the college would be taken into account. No assistance will be available from the UGC for programmes and facilities required for Intermediate or Pre-University courses, if any, offered by the colleges.

(b) The assistance from the UGC for development of colleges during the Fifth Plan period will primarily be to help viable colleges in strengthening their faculty, in improving their library and laboratory facilities and in providing them with workshop and other

similar facilities which will enable the colleges to achieve and maintain proper standards and move towards the status of an autonomous institution either during the Fifth Plan or by the beginning of the next plan period. To be eligible to receive assistance from the Commission for its development programmes, every college —

(i) should be permanently affiliated to the university after fulfilling all conditions prescribed for purposes of affiliation by the university (in case of colleges set up after June 1972) and

(ii) should have a minimum of 400 students in degree classes and a staff of at least 20 suitably qualified permanent teachers. In the case of colleges providing two-year degree course, the minimum required enrolment will be 270 and at least 15 suitably qualified permanent teachers.

This condition of minimum enrolment and staff strength may be relaxed in the case of :

(i) Colleges with innovative educational programmes;

(ii) Colleges located in backward areas;

(iii) Colleges for women students; and

(iv) Professional colleges.

(c) Assistance to sub-viable colleges will be only through specialised programmes under the guidance of the university, e.g., the University Leadership Project of the College Science Improvement Programme as at present or through similar programmes that may be developed by the Commission. Opportunities which will be provided for degree college teachers to improve their competence as teachers, through faculty improvement programmes, will be available to teachers in sub-viable colleges also.

(d) While a college should have a minimum enrolment to enable it to function as a viable institution, colleges should stabilise their enrolment at an optimum level, depending on the facilities available. Demands for expansion in enrolment at the degree level will have to be met substantially through correspondence courses, part-time

courses and evening classes. These evening classes should be held only in well-equipped colleges.

(e) Several quality oriented programmes would be initiated by the Commission. These would include the college science improvement programme already started in the fourth plan and continued in the present plan, college humanities and social science improvement programme, faculty improvement programmes, examination reforms, support for research by individual teachers and giving academic autonomy to selected colleges.

(f) Efforts will be made to link education with employment opportunities and to bring about collaboration between courses in colleges and neighbourhood industries, trade and business organizations. Colleges in rural areas will be assisted to restructure their courses so as to make them relevant to rural needs.

(g) Since the development of practical skills in the use of tools and mechanics is an integral part of the science education programmes, the Commission will provide assistance for development of suitable workshops which would help in —

(i) proper maintenance of the scientific equipment in the college departments;

(ii) providing opportunities for the training of students; and

(iii) providing facilities for the staff for development of educational tools.

Preparation of Development Proposals

In preparing their developmental proposals, the colleges have been asked to keep the following in view :

(a) Every college seeking institutional support from the UGC should prepare an integrated plan relating to its development programmes for the various faculties and departments and other general amenities during the fifth plan.

(b) The universities, while forwarding such proposals of the college, may state specifically that the institution concerned has fulfilled all conditions of affiliation prescribed by the university for various courses of study offered by the college and that the assistance now

sought by the college is justified in terms of its academic programmes, educational goals and objectives, and would contribute towards meeting the educational needs of the region concerned.

(c) As far as possible, expenditure on construction programmes should be limited to not more than 1/3rd of the grant likely to be available from the Commission. Construction of buildings should be so planned that they provide for more functional areas required for classrooms, laboratories and libraries and construction costs should be kept down by use of local materials as far as possible.

(d) Where colleges are assisted to construct hostels for students, the colleges would be required to provide 20 per cent of the seats in such hostels for students belonging to scheduled castes and scheduled tribes. However, if requisite number of students belonging to such communities are not available, these may be given to other students.

(e) It would be necessary for every college seeking assistance from the Commission for construction of buildings to set up a buildings committee.

The UGC assistanee during the Fifth Plan period would be available for construction of buildings, purchase of books and equipments, faculty improvement, additional staff and innovative programmes. The pattern of assistance for various purposes in respect of schemes accepted by the Commission in affiliated colleges is given in Appendix XI.*

The Commission also considered during the year the pattern of assistance for development of postgraduate studies in the affiliated colleges in sciences, humanities and social science subjects.

Grants for the Development of Colleges

The Commission continued to give grants for the development of colleges on the basis of the pattern of assistance approved by it in the beginning of the Fourth Plan period, as indicated in the UGC Annual Report for 1973-74. Assistance was provided to the colleges on the usual sharing basis for library and laboratory facilities, semi-micro analysis equipment, class room and lecture theatres, workshops, non-resident student centres,

* In the case of colleges in backward areas as defined by the Planning Commission, it has been agreed to that the share of the UGC will be 66.66 per cent instead of 50 per cent for other colleges, in respect of the buildings, libraries, laboratories and class rooms including furniture and fittings.

residential accommodation for staff, student hostels, tube-wells, over-head tanks, cycle sheds and chalk-boards. Grants paid to colleges during 1974-75 under various schemes are detailed below :

Grants paid under Rs. 3 lakh scheme to Affiliated/Consitutent Colleges (continuing from the Fourth Plan) (1974-75)

Item of Assistance	*Number of colleges*	*Amount paid in Rs.*
(i) Construction of hostels	91	45,96,948
(ii) Laboratory and library facilities	445	1,27,57,777
(iii) Construction of staff quarters	77	34,29,053
(iv) Books and journals	100	2,98,283
(v) Improvement of chalk boards	31	80,411
(vi) Overhead tanks	13	1,84,735
(vii) Cycle sheds	17	1,18,437
(viii) Non-resident student centres	64	9,86,437

The Commission continued to provide support for the development of postgraduate studies in colleges and attached high priority to these programmes. Assistance was provided towards the programmes accepted in the Fourth Plan and subject to allocations made during the fourth plan period on the usual sharing basis. Grants paid during 1974-75 for the development of postgraduate studies in Science and in Humanities and Social Sciences are detailed below :

Grants Paid for the Development of Postgraduate Studies in the Colleges (1974-75)

	Number of Colleges	*Amount paid in Rs.*
(i) Development of postgraduate studies in science	52	13,87,275
(ii) Development of postgraduate studies in humanities and social sciences	35	5,00,792

Delhi Colleges

The Commission continued to provide a maintenance grant to colleges of Delhi University. Grants amounting to Rs. 6,17,17,439 under non-plan projects were paid during the year 1974-75. In addition to this, non-recurring grants amounting to Rs. 35,29,471 were also paid for the development projects of the colleges of Delhi University. This enabled the colleges to improve their library, laboratory and building facilities.

SECTION V

Students

The provision of student amenities in the universities and colleges is not merely a welfare activity but constitutes an integral part of education. These include the provision of scholarships and fellowships, hostel facilities and non-resident student centres, study centres, students' aid fund, health centres, book banks, sports and physical education and employment information and Advisory Bureaux. It may be mentioned in this connection that all development programmes of the Commission including appointment of staff, construction of academic buildings, libraries and laboratories, purchase of equipment and books and journals etc., have a direct or indirect bearing on the well-being of the students and on the promotion of a congenial environment and conditions for studies and researches. However, the main focus of the Commission's programme in relation to student welfare is on the creation of conditions conducive to study and learning, specially in regard to needy and poor students on the one hand and the meritorious students on the other. The Commission's programmes having a direct bearing on students study and learning are reviewed below :

(*a*) *Scholarships and Fellowships*

The Commission has given a sufficiently high priority to the award of scholarships and fellowships for the development of research in the universities and colleges. The objective of the scheme is to enable academically bright students to carry on their research as an independent and full time activity through adequate support for their maintenance and for the purchase of books, journals, equipments etc., by them.

In addition to the fellowships specially created for Centres of Advanced Study, and those provided for approved programmes of research and departments selected for special assistance, the University Grants Commission awards annually Senior and Junior Research Fellowships in Sciences and Humanities including Social Sciences and Research Fellowships in Engineering and Technology on an all-India basis.

Senior Research Fellowships

The value of Senior Research Fellowships in Sciences and Humanities including Social Sciences has been revised from Rs. 500 p.m. to Rs. 600 p.m. with effect from 1.7.1974. The number of senior fellowships awarded each year has been raised from 60 to 100 with effect from 1974-75. Annual contingent grant attached with these fellowships has been raised from

Rs. 1,000 to Rs. 2,000. The tenure of fellowships remains for two years. During 1974-75, 68 fellowships were awarded. At the end of the year, 73 Senior fellows in Science and 57 in Humanities were working under the scheme in different universities/colleges.

Junior Research Fellowships

With effect from 1.7.1974 the value of Junior Research Fellowships in Sciences and Humanities including Social Sciences has been raised from Rs. 300 p.m. to Rs. 400 p.m. for the first two years and Rs. 500 p.m. thereafter for another two years after the work of the fellow has been assessed and found satisfactory.

The tenure can be extended by another six months in special cases, on the recommendation of the University/Head of the department. The number of fellowships has been raised from 120 per annum to 200 per annum. The contingency grant attached with the fellowship has been raised from Rs. 1,000 to Rs. 1,500 per annum.

During 1974-75, 130 awards of the value of Rs. 400 p.m. and 10 awards of the value of Rs. 500 p.m. were made in Sciences and 77 in Humanities each valued at Rs. 400 p.m. These included 21 awards made to scheduled castes and scheduled tribes candidates. At the end of the year, 212 Junior fellows in Science and 197 in Humanities were working under the scheme.

Research Fellowships in Engineering and Technology

In the year under report, the Commission invited applications for the award of research fellowships in Engineering and Technology. The awards could be finalised only in 1975-76, when 60 awards were made. At the end of 1974-75, 58 research fellows were carrying on research under the scheme.

Junior Research Fellowships allocated to Universities

In addition to the fellowships mentioned above, the Commission has been allocating every year lump sum grants to Universities under the junior research fellowship scheme being implemented by the Universities. During 1974-75 grants amounting to Rs. 1,43,20,000 were sanctioned to 78 universities to cater for 3400 junior research fellowships in Science and Humanities. This includes the contingency grant of Rs. 1,500 per annum payable to each fellow. The allocation to the universities is being raised to cater for 650 Junior Research Fellowships instead of 600 p.a. as at present. The total number of fellowships, available with the universities would thus be 2,600 at any given time.

Hill Area Fellowships/Scholarships

The Commission also awards junior research fellowships and scholarships for postgraduate studies to the students belonging to Hill Areas of North Eastern Region and Ladakh. Under this scheme 5 junior research fellowships were awarded during 1974-75.

Scholarships

As in the previous years, the Commission provided scholarships for pursuing honours/postgraduate studies in Persian/Arabic and for postgraduate studies in Sanskrit. During the year 10 scholarships for honours studies in Arabic and Persian (of the value of Rs. 1,200 per annum) and 9 scholarships for postgraduate studies (of the value of Rs. 1,800 per annum) were awarded by the Commission. Twenty scholarships for postgraduate studies in Sanskrit were also awarded. Under the Hill Area scholarships scheme 23 scholarships were awarded during 1974-75.

Fellowships for Foreign Students

The Commission agreed to the institution of 10 Junior and 5 Senior Research Fellowships for foreign students from among developing countries for undertaking research work at the Indian Universities. The proposal will be implemented after obtaining the concurrence of the Government of India.

(*b*) *Non-Resident Student Centres/Student Homes*

Non-resident student centres and student homes set up by the universities and colleges with assistance from the Commission provide facilities for study to day scholars through their leisure hours. Student homes provide facilities for about 100 students and rack space for 5,000 books, besides a cafetaria and a dining hall. The Commission's share towards each student home in the universities is limited to Rs. 1,00,000 or the actual cost whichever is less. A non-recurring grant of Rs. 24,000 is also available for purchase of books and furniture for the student home. Grant of Rs. 6,44,978 was paid to the universities for the establishment of student homes in 1974-75 in addition to a grant of Rs. 1,67,408 for non-resident student centres. During the year under review a sum of Rs. 9,86,437 was paid to the colleges for NRSCs.

(*c*) *Construction of Hostels*

The Commission has been giving a high priority for the programme of hostels for students in universities and colleges in view of the fact that

improvement of the conditions in which students live and work has an important bearing on their academic performance. Provision of hostel facilities is one of the important items included in the general programme of development of universities and colleges.

The Commission's assistance for construction of hostels to universities and colleges has been on a sharing basis, the Commission providing 50 per cent in the case of men's hostels and 75 per cent in the case of women's hostels. During 1969–74, the Commission provided hostel facilities for 12,559 students in 63 universities and 16,312 students in 286 colleges. In spite of financial difficulties, a sum of Rs. 2.37 crores to universities and Rs. 2.47 crores to colleges was paid by the Commission for this purpose.

In the Fifth Five Year Plan too, hostels have been given priority in the programmes proposed or to be proposed by universities and colleges. The provision of hostel facilities has become more important in the Fifth Plan because of Commission's policy of restraining the establishment of new colleges and universities. In the interests of social justice, the Commission has decided that in the Fifth Plan all institutions assisted by it to construct students' hostels would be required to reserve 20 per cent of the seats in such hostels for students belonging to scheduled castes and scheduled tribes. Hostels are, therefore, important for ensuring access to higher education to the under-privileged classes or sections of society. For this purpose, the Commission has also decided that its assistance for construction of hostels in backward areas will be at the rate of 75 per cent of the total expenditure as against 50 per cent available for other areas.

During 1974–75, 40 such projects were assisted and a grant of Rs. 77,58,732 was given to the universities for this purpose. A grant of Rs. 45,96,948 was paid to 89 colleges in 1974–75 towards the construction of hostels.

For improvement of hostel facilities, grants amounting to Rs. 45,882 were also paid to four universities in 1974-75.

(d) Study Centres

The University Grants Commission has agreed to the establishment of 111 Study Centres equipped with multiple copies of textbooks in towns and cities having large populations of university and college students. The financial assistance from the Commission for each study centre is as follows:

Non-Recurring	
Books	Rs. 20,000
Stacks & Furniture	Rs. 10,000
Recurring	
Asstt. Librarian	Rs. 10,000 p.a.
Contingencies	Rs. 3,000 p.a.

The Commission has agreed to assist the universities for meeting the recurring expenditure upto the end of the Fifth Plan period. A grant of Rs. 4,77,401 was paid in 1974-75 towards the establishment of study centres to 18 universities.

(*e*) *Students' Aid Fund*

The scheme of Students' Aid Fund was initiated to enable needy students in the universities and colleges to have some assistance for paying tuition and examination fees, purchasing books and meeting other expenses related to their studies. The Commission pays to the universities a grant equal to the amount collected by them from their departments and affiliated colleges subject to a maximum of Rs. 1,500 p.a. Grants ranging from Rs. 750 to Rs. 5,000 p.a. are paid to the colleges on the basis of their enrolment. In 1973–74 the Commission paid a grant of Rs. 2,00,919 to 31 universities and Rs. 39,34,433 to 1,725 colleges under the scheme. In 1974–75 grants amounting to Rs. 4,79,493 were paid to 34 universities and an institution deemed to be university and Rs. 23,13,337 to 1,261 colleges under the scheme.

(*f*) *Health Centres*

The Commission has agreed that assistance may be provided to universities (the university and two colleges affiliated to the university forming a complex) for the development of health centres for their students. The Commission's assistance on this project was on the following pattern:

Universities			
Non-recurring	—for building & equipment	Rs. 1,50,000	on 75:25 sharing basis
Recurring	—for staff	Rs. 30,000 p.a.	on 50:50 sharing basis
Colleges			
Non-recurring	—for building & equipment	Rs. 75,000	on 75:25 sharing basis
Recurring	—for staff	Rs. 20,000 p.a.	on 50:50 sharing basis

The Commission's assistance under the scheme is provided to the universities and colleges outside their plan allocation. In 1973–74 a grant of Rs. 1,80,875 was paid to 9 universities and a grant or Rs. 1,82,481 to 9 colleges under the programme. In 1974–75, a grant of Rs. 8,34,488 was paid to 15 universities and a grant of Rs. 2,39,382 to 10 colleges under the programme.

(g) *Book Banks*

The University Grants Commission decided that the scheme for assistance to the colleges for setting up book banks be continued in the Fifth Five Year Plan period. Accordingly, assistance is provided to arts, science and commerce colleges which are included under Section 2 (f) of the UGC Act for establishment of book banks with the specific purpose of making available to deserving students, books on loan for the period of their studies. A special section is set up in the college library as a kind of book bank for this purpose. The assistance for the purpose is provided on the same basis as in the Fourth Plan and as indicated below*:

	Allocation Rs.	*UGC Contribution*
(i) A college with a student enrolment of 500 or above but less than 1000	15,000	75% of the allocation
(ii) A college with a student enrolment of 1000 or above but less than 1500	20,000	-do-
(iii) A college with a student enrolment of 1500 or above but less than 2000	25,000	-do-
(iv) A college with a student enrolment of 2000 or above	30,000	-do-

The colleges concerned are required to provide matching contribution of 25 per cent of the allocation from their own resources.

With a view to extending the assistance under the book bank scheme to smaller colleges also, the Commission agreed that in addition to the existing categories of assistance, colleges having an enrolment between 259 and 500 students may be provided an amount of Rs. 10,000 on the usual sharing basis for purposes of establishing book banks.

* It has since been decided that a College with an enrolment of 100—249 will be entitled to an allocation of Rs. 8,000 and a college with an enrolment of 250—499 to an allocation of Rs. 10,000 on the same sharing basis.

In 1973–74, a grant of Rs. 9,91,460 was paid to 228 colleges for the establishment of Book Banks. In 1974–75, a grant of Rs. 58,14,073 was paid to 592 colleges for the purpose.

(*h*) *Sports and Physical Education*

The Commission had agreed to assist 32 universities and 85 colleges (upto 31st March 1974) for the construction of gymnasia in the first phase of the programme. The pattern of assistance is as under:

Universities:	Rs. 2,50,000	on 75:25 sharing basis
Colleges:		
(a) with an enrolment of 1,500	Rs. 1,50,000	–do–
(b) for small college	Rs. 75,000	–do–

A grant of Rs. 13,97,767 was paid in 1973–74 for the construction of gymnasia to 12 universities and 36 colleges. In 1974–75, a grant of Rs. 8,55,000 was paid to 15 universities and a grant of Rs. 4,67,412 to 23 colleges for the construction of gymnasia.

Assistance is also being given to universities and colleges for the development of play fields and purchase of accessories for games and sports. The Commission has agreed to meet 75 per cent of the total expenditure of Rs. 15,000 for this purpose in the case of a university and Rs. 10,000 in the case of a college. Keeping in view the availability of funds for the programme the Commission's assistance is available to all the universities and upto 20 per cent of the affiliated colleges in the first phase of the programme. A grant of Rs. 3,47,003 was paid in 1973–74 to 13 universities and 98 colleges for the development of play fields. In 1974–75 a grant of Rs. 34,375 was paid to 5 universities and a grant of Rs. 60,643 to 36 colleges for the purpose. In order to provide efficient and enlightened guidance to university students in various games and sports, the Commission is assisting universities and colleges to employ trained coaches. A grant of Rs. 91,290 was paid to 11 universities for the purpose in 1973–74. In 1974–75, a grant of Rs. 1,86,070 was paid to 14 universities for the appointment of trained coaches.

(*i*) *Employment Information and Advisory Bureaux*

The Commission at its meeting held on 5th May 1971 agreed to provide assistance upto the end of Fourth Plan for Employment Information-cum-Advisory Bureaux in the universities and career advising units in the colleges. In July 1972 it was decided that only those colleges which have trained teachers may be assisted under the scheme of career advising units. At

present 34 career advising units and 15 university bureaux are being assisted by the Commission under the scheme.

The Commission appointed an Expert Committee to review the working of the scheme and on its recommendations agreed to provide a lump sum ad hoc grant of Rs. 500 to the career advising units in colleges for purchase of books and journals relating to careers. It also desired that evaluation of the working of some of the university bureaux may be expedited in association with the Directorate General of Employment and Training.

SECTION VI

Faculty Improvement Programmes

The University Grants Commission has been attaching great importance to faculty improvement programmes by providing opportunities to teachers to keep abreast of modern developments in their fields of study and research and to exchange ideas with experts in similar or related fields. The Commission has done a good deal of thinking in this regard and drawn up an integrated and comprehensive plan for faculty improvement. The Commission has agreed to provide necessary financial support during the Fifth Five Year Plan for raising the professional competence of teachers in the affiliated colleges with the following programmes: The programmes have been designed to be implemented simultaneously to produce the multiplier effect.

1. *University Leadership Projects*

It is proposed that during the Fifth Plan Period, every University which has more than 25 affiliated colleges providing undergraduate studies may be invited to take up a University Leadership Project in each of the major subjects where it has strong viable university departments, so that the instructional facilities and the material for curriculum and examination reform in the colleges with preparation of necessary textbooks, laboratory manuals, monographs etc., to bring about the reform in syllabus as well as in examinations at the undergraduate level are made available to the participating teachers.

It is expected that about 40 additional University Leadership Projects would be initiated in science subjects and a similar number in humanities and social sciences during the Fifth Plan period.

2. *Refresher Course/Short-term Institutes (University/State based) of about six weeks' duration each, during summer or other vacations*

The Refresher Course and Short-term Institutes would be of 6–8 weeks' duration to be held during the summer or other vacations of the university. The universities would be free to organise such institutes at any time convenient to them throughout the year preferably during the vacations. It is proposed that each university or a group of universities within a state having affiliated colleges, may take up the responsibility to organise each year at least one institute each in the science subjects and one in social science subjects depending on the number of teachers and the number of affiliated colleges. It is proposed that;-

(i) One institute each in Science subjects and one in Social Science subjects may be held if the total number of teachers in the subject concerned in the state is less than 150;

(ii) two institutes each in Science subjects and two in Social Science subjects may be held if the total number of teachers in the subject concerned is between 150 and 400;

(iii) Three institutes each in Science subjects and three in Social Science subjects may be held if the number of teachers is over 400.

3. *All India Advanced Level Institutes in specialised topics or subjects, of about six weeks' duration*

The all India advanced level institutes would enable teachers from universities/colleges from different regions to avail of the opportunities for getting acquainted with the latest developments in the subject concerned through lectures, seminars, discussions and possibly through project work. One or two such all India advanced level institutes may be organised in each major subject annually. It would be desirable for a college teacher to participate at the advanced level institute after he has attended at least one institute organised in his state by his university. The total number of participants in an all India advanced level institute may be about 50 and not more than 25 per cent should be drawn from the university teachers as participants, the majority being from the postgraduate colleges.

4. *English Language Teaching Institutes on All India Level*

About 6–8 institutes in English language teaching may be organised each year for the benefit of teachers of English in the Colleges. The English Language Institutes may be of 6–8 weeks' duration to be located in different regions so as to cover as many college teachers as possible, region-wise.

5. *Fellowships for Teachers in Affiliated Colleges at Rs. 250 p.m. as a living allowance in addition to the salary which he continues to get from the parent institution (when the teachers elect to carry out their higher studies and research at outstation centres).*

Teacher fellowships are specifically meant to provide opportunities for teachers to work towards either an M.Phil or M.Litt. or a Ph.D. degree and as such may be of two types:

(i) short term fellowship of one year duration: and (ii) long term fellowship of duration not exceeding three years.

6. *National Associateships, for one year, with provision of visits to specialised laboratories or institutions for research work over a period of 8–12 weeks during the tenure of the award for one year.*

Teachers from affiliated colleges or university departments will be selected for a single visit during a year to work in any of the universities/research institutions having specialised facilities connected with their research work over a period of 8–12 weeks.

7. *Seminars, Symposia, Conferences etc., in Specialised Topics or Subjects of one to two weeks' duration.*

These are proposed to be continued for enabling academic meetings on an all-India basis or regional basis for specified purposes. The selection of such institutes would be made, as at present, with the help of an advisory committee once a year prior to the beginning of the academic year. The seminars and workshops etc., should not be of less than one weeks' duration and not more than two weeks' duration. The duration in respect of conference etc., would however, vary.

The Commission firmly believes that success of these programmes would be possible only with the cooperation of the state governments, the universities and the college authorities and the teachers concerned. The Commission has already addressed the Vice-Chancellors of the universities and the education secretaries of the state governments requesting their cooperation in implementing the programme effectively.

The Commission has formulated guidelines for the implementation of the faculty improvement programmes pertaining to teachers in the affiliated colleges and has initiated action in all the areas outlined above.

Ongoing Programmes

The schemes of the University Grants Commission for retraining and orientation of teachers, research support to individual teachers and departments, qualifications of teachers, their assessment and workload etc. and utilisation of the services of retired teachers are reviewed below.

Seminars, Symposia, Refresher Courses, Workshops and Conferences

The University Grants Commission has been supporting the efforts of universities and colleges in providing opportunities to their teachers and research workers to keep abreast of modern developments in their fields of study through grants towards the organisation of seminars, symposia,

workshops and in all 110 seminars, symposia, refresher courses, workshops and conferences were organised during 1974–75, as detailed below:

Summer Science Institutes for College Teachers

The Summer Science Institute project for college teachers was initiated by the University Grants Commission in 1964. The institutes provide opportunities to teachers to familiarise themselves with current developments and also to find inspiration and stimulation through personal contacts with well-known scientists, scholars and colleagues from other parts of the country.

In all 46 science summer institutes were organised during 1974–75.

Summer Institutes in Humanities and Social Sciences

The main objective of the institutes is to make the participants familiar with recent advances in their respective disciplines and also to give the participants an opportunity for discussion and exchange of ideas.

In all eight summer institutes were organised in Humanities and Social Sciences during 1974–75.

Summer Institutes in English Language Teaching

Since 1965, the University Grants Commission has been supporting the organisation of summer institutes in English for the benefit of college teachers of English. The Commission has been organising these institutes in collaboration with the Central Institute of English and Foreign Languages, Hyderabad and the British Council Division, New Delhi.

Five summer institutes in English Language Teaching were organised during 1974–75.

Seminars, Refresher Courses and Conferences

The Commission continued to provide financial support for the organisation of seminars, refresher courses, symposia and conferences to help teachers in the universities and colleges to exchange ideas and benefit by the experience, studies and research of their peers from other institutes.

During 1974–75, a grant of Rs. 7,31,698 was paid to 51 universities in addition to a grant of Rs. 28,489 to eight colleges for organising seminars etc.

During the year under review, the Commission agreed to provide financial assistance to learned bodies for holding their annual sessions on the basis of contribution from the Commission rather than on sharing basis.

National Fellowships

Twenty national fellowships are available for teachers of outstanding eminence to take a year or two off from normal duties to devote themselves exclusively to research and writing of results of their study. Teachers selected under the programme receive their normal salary and other allowances and a fellowship allowance of Rs. 250 per month in addition to a grant of Rs. 3,000 a year for secretarial assistance, travel and contingent expenditure. At the end of the year under review, 12 teachers were engaged in research under this scheme. In 1974-75, a grant of Rs. 1,38,445 was paid under the scheme.

National Lectureships

The scheme of national lectureships was initiated in 1970-71 to enable outstanding teachers and research scholars to visit different university departments for delivering a series of lectures in their special fields and to participate in the academic programmes of the host universities. The Commission provides to the selected teachers an honorarium of Rs. 1,500 and a grant of Rs. 250 for the preparation of lecture aids, etc. in addition to travel expenses and support for publication of the lectures. During the year 14 teachers in science subjects and 15 teachers in the humanities and social sciences were invited to participate in this programme. In 1974-75 a grant of Rs. 61,030 was paid under the scheme.

National Associateships

Facilities are available to teachers engaged in research to visit and work for short periods in advanced institutions which provide special facilities required for research in the science, humanities and social sciences. Upto the end of the 1974-75, 141 teachers were selected to participate in the programme. The selected teachers are kept on the national associateship role for a period of five years and are able to visit the host institutions in India three times in a five year period, each visit of a period of not more than 12 weeks at a time. In 1974-75 a grant of Rs. 19,752 was paid under the scheme.

Sabbatical Leave

In 1971-72, the Commission started, as an experimental measure, the scheme of sabbatical programme for Physics teachers of the constituent

colleges of Bombay University to bring about improvement in teaching of the subject in the colleges. The programme helped six teachers of the university to work in the Tata Institute of Fundamental Research thus own and otherwise benefiting from the general activities and atmosphere of the Institute. The participating teachers engaged themselves in curriculum development and experiments for undergraduate students. The leave salary of the participating teachers is paid by the Commission.

Commonwealth Academic Staff Fellowship/Scholarship

This scheme has been in operation since 1968. Under this scheme every year University Grants Commission recommends to Commonwealth Scholarship Commission, UK names of suitable candidates from universities and colleges in India for awards. The awards are tenable in UK for periods varying from one to two years. During the period under review, 13 candidates were selected for fellowship and six for scholarship.

Programme of Exchange of Younger Scientists between India and UK

The programme of Exchange of younger scientists between India and UK began in 1963 initially with provision of six places each way. Subsequently this number was raised to 20 on the basis of periodical reviews of the benefits accruing to the participating scientists and institutions under this programme. The total number of Indian scientists and UK scientists who participated in this programme upto the year under review was 106 each way.

Research Support to Universities

Research support to universities and assistance to individual teachers working in the universities and colleges for undertaking research in their special fields are discussed in Section VIII of the report.

Travel Grants

Travel grants are available to teachers in the universities for attending international conferences abroad, for visiting centres of research or attending academic conferences within India. For meeting expenditure on these and other items, an unassigned grant is placed at the disposal of each university every year. Colleges can also sponsor the participation of teachers working with them in international conferences, provided they are willing to meet 50 per cent of the cost of international travel from their own/university/government funds. In such cases, the remaining 50 per cent of the expenditure is provided by the Commission, subject to the approval of the Commission. A grant of Rs. 91,147 was paid in 1974-75 as travel grant

to research fellows/scholars/college teachers for attending conferences in addition to Rs. 15,37,183 placed at the disposal of universities as unassigned grant.

Staff Quarters/Teachers' Hostels

The Commission continued to provide grants towards the construction of staff quarters/teachers' hostels approved during the fourth plan period. A grant of Rs. 29,18,969 to 32 universities and a grant of Rs. 34,29,053 to 77 colleges was paid in 1974–75 towards the construction of staff quarters, in addition to a grant of Rs. 12,30,745 to 20 universities for the construction of teachers' hostels.

Utilisation of the Services of Retired Teachers

Since 1961–62, the University Grants Commission has been implementing the scheme for Utilization of Services of Retired Teachers under which universities, colleges and approved institutions are assisted to avail of the services of teachers of outstanding merit who have crossed the normal age of retirement but who are otherwise fit to continue their teaching and research work.

An honorarium of Rs. 6,000 p.a. and an annual grant of Rs. 1,000 for meeting authorised contingent expenditure in connection with the approved research and teaching work are admissible to an awardee. He may also receive honorarium or other facilities, if provided by the institution where he works under the scheme upto a maximum of Rs. 4,000 p.a. after obtaining the prior approval of the Commission.

Assistance to a person under the scheme is limited to a period of three years in the first instance. On the recommendations of the Vice-Chancellor concerned, it may be continued, thereafter, till the age of 68 provided the teacher retains active interest in academic work. Assistance under the scheme is normally available for a maximum period of five years.

Under the rules, the awardee is expected to devote his time to academic pursuits. He is also required to give about six hours a week for contact work with the students which could be in the form of class room teaching/seminar/guiding research scholars/special lectures.

Out of 178 teachers who were working under the scheme (as on 30.9. 1975), 59 were running their first year of award, one his second year, 51 their third year, 62 their fourth year and 5 their fifth year. In 1974–75, the Commission paid a grant of Rs. 8,83,341 under the scheme.

SECTION VII

Cultural Exchange Programme and International Collaboration

The University Grants Commission is required to implement such items of the cultural exchange programme as form part of agreements between the Government of India and the foreign governments and are assigned to the Commission for implementation. These involve exchange of teachers/scholars for lecture-cum-study, exchange of views, training for short and long periods, scholarships and fellowships. The visits may range from a period of three to four weeks to one academic year.

During 1974–75, the Commission implemented regular cultural exchange programmes with a number of foreign countries e.g. Afghanistan, Bangladesh, Bulgaria, Czechoslovakia, Hungary, Poland, Romania, GDR, FRG, France, Iran, USSR, Yugoslavia, Arab Republic of Egypt and Mangolia. Besides these, the Commission also implemented ad hoc programmes of bilateral academic exchanges with some countries. During this period, the Commission received 41 foreign visitors who visited a number of universities and other institutions and met academics and research workers there and delivered lectures. Nineteen Indian teachers/scholars were sent abroad in 1974-75. The exchange of visits by academics from India and foreign countries and their training have provided excellent opportunities to our teachers to study the latest developments in different disciplines in various countries. On the basis of the reports received from the Indian teachers, the Commission has been able to formulate effective collaborative programmes between selected universities/institutions in India and those in foreign countries. In order to derive the maximum academic benefit from these cultural exchange programmes, the Commission had appointed committees to identify areas/disciplines of specialisation as also the institutions/universities which could have bilateral academic programmes. The fields identified by these committees have been utilised in formulating proposals for exchange with Czechoslovakia, France, Belgium, USSR, FRG and Yugoslavia.

Indo-British Universities Collaboration Programme

This programme envisages academic collaboration between two equal partners in pursuit of higher studies and research without involvement of any equipment or book component. The areas/specialisations for collaboration are identified on the basis of exchange of exploratory visits by senior faculty members of the participating universities. It provides facilities for exchange of teachers and scholars between two participating universities on the basis of programmes agreed to between them and as approved by the implementing agencies in India and UK viz., the University Grants Com-

mission and India Committee (British Council) and also for undertaking joint research programmes to mutual advantage. The object of this scheme is to provide opportunities for improvement in standards of teaching and also for taking up joint research programmes in areas of mutual interest. The scheme provides for the development of a focal point of collaboration with a particular university in UK. The sponsoring side is responsible for meeting the expenses towards international air fare and its nominees and the receiving side provides necessary maintenance of the visiting teachers and scholars for the duration of their stay in the foreign country under the programme. Fifteen links under this programmes have been approved.

During the year under review, the British Council made available 4-man months to be utilised by Indian teachers for the collection of material for their research projects not available in India. Under this scheme, the UGC provides both ways, international air fare and the British Council provides expenses for the maintenance of the Indian scholars in UK.

Scheme for assisting Universities for inviting Indian Scholars working Abroad

The Commission has initiated a scheme for assisting universities for inviting Indian scholars in foreign universities to enable such scholars to spend either part or whole of their sabbatical leave to engage themselves in teaching and research in Indian universities. Such assignments under the scheme should be for a period of not less than three months during the academic year and should not exceed one academic year in any case. The Commission provides assistance to the universities on a cent per cent basis for the payment of honorarium of Rs. 1,000 per month for the period of their work in Indian universities. Besides this the Commission also provides assistance for meeting the travel expenses of the selected scholars for visiting a few other universities engaged in work in the subject of the scholar's research work. Ordinarily, the Commission does not provide assistance towards the cost of international travel.

SECTION VIII

Support for Research

During the year under review, the University Grants Commission formulated its policy for support of research in the universities in the sciences, humanities and social sciences, engineering and technology subjects during the Fifth Plan period. Besides providing for project-based research support to individual research workers, groups of research workers and also departmental support for research, the University Grants Commission would provide during the Fifth Plan period, a core support for research to every university to encourage research and create research interest in every university department. This approach for providing substantial support for research in the university system is consequent upon the recognition of the fact that the universities have been able to build up minimal infrastructure facilities in most disciplines with the help of assistance available to them for development in the past plan periods and these departments, presently in different stages of growth and development and facilities for teaching and research, should be assisted to strengthen their research activities along lines related to national needs and over a period of time get established as viable research schools capable of continuous and sustained effort of research—both for purposes of training as well as solving problems of scientific, technological and regional or national relevance.

(*a*) *Science, Engineering and Technology*

In order to advise the Commission to effectively implement these programmes and utilise the available resources so as to derive the maximum benefits to the university system as well as to the nation, the Commission constituted a number of Panels in individual subject areas.* These Panels, consisting of experts in different disciplines within the subject, have evaluated the status of development of each of these subjects and facilities available for advanced study and research and in the background of this general as well as departmentwise information consider specific research programmes received from the universities. The Panels also obtain expert evaluation on individual research projects and on consideration of the viability and utility of the proposed research activity, make suitable recommendations with regard to the projects which may be funded. The recommendations of the different panels are then considered by the Science Research Council specially constituted for the purpose of ensuring effective utilisation of resources available for support of research, disciplinary, inter-disciplinary and multi-disciplinary as well as R & D oriented research in relation to prime areas identified by the National Committee on Science and Technology

* A list of the UGC Subject Panels in Science is given in Appendix XII.

and also coordination of research efforts between the university system on the one hand and the specialised R & D laboratories, user industries etc., no the other.

Proposals for seeking support for their research programmes were invited from the universities and colleges during 1974–75 and onwards. Appendix XIII gives information in relation to the total number of proposals received so far, their present status of consideration and number of proposals accepted for support in science subjects. In addition to these major research projects being supported, the Commission, during 1974–75, accepted 275 minor research projects. The number of active projects in process is 800.

The University Grants Commission also considers proposals of research programmes to be taken up through international collaboration and funds available under agreed programmes of collaboration cleared by the Government of India A number of such research projects, e.g. with the use of PL 480 funds are currently in progress in the universities. With the help of the Science Panels, the University Grants Commission makes available an academic assessment of the research programmes to be considered for support from PL-480 funds by the National Screening Committee of the Ministry of Education, Government of India.

The University Grants Commission, on the advice of the Panels, has also identified a few selected areas for collaborative research between the university departments and the laboratories of the CSIR, Atomic Energy Commission, etc.

A Directory of Scientific Research in progress in the Indian universities (1974) has been published as a joint publication of the University Grants Commission and the Council of Scientific and Industrial Research. The Directory contains information on 9,908 current research projects taken up by about 11,000 scientists working in nearly 1000 departments in the various academic institutions.

In addition to providing support for individual or group research projects, the Commission has under consideration the question of providing major support for integrated departmental research programmes in a few selected departments in each subject. The programmes of Centres of Advanced Study and Special Assistance to selected departments initiated by the University Grants Commission in 1963–64 and 1972–73 respectively, includes a substantial part of funds to support research programmes as well as collaborative effort between such identified departments and other universities, national laboratories, R & D institutions, etc., besides providing facilities for advanced training in chosen disciplines.

(b) Humanities and Social Sciences

With a view to promoting advanced study and research in the humanities and social sciences, the University Grants Commission is providing financial assistance to university and college teachers for research or learned work in their respective fields of specialisation.

Research on inter-disciplinary basis and research areas which have remained relatively neglected but which are of crucial importance to the social and economic life of the country receive priority.

Assistance from the Commission to a teacher working in a university college or an institution approved under the UGC Act is available for short-term projects in the humanities and social sciences which could be completed in a year or two as well as for advanced research which may take longer.

Short-term Projects

Under the scheme of short-term projects, financial assistance upto Rs. 5,000 may be provided to a university or college teacher who wishes to undertake, along with teaching work, a short term research project or an investigation for a doctoral degree under approved supervision in any discipline in the humanities and social sciences. The principal beneficiaries of the scheme are teachers in the affiliated colleges and younger teachers in the universities.

The Commission approved 224 of 918 projects received for the two selections made in 1974–75 and 90 of the 228 projects received for the first selection in 1975–76. A grant of more than Rs. 10 lakhs has been committed in support of these projects.

Advanced Research

The Commission provides support to teachers in the universities and colleges with facilities for postgraduate studies and research to enable them to take up advanced research work on intensive and depth studies in specific areas in the humanities and social sciences.

Research project may be undertaken by an individual teacher or by a group of teachers or by a department as a whole. The Commission also considers research investigations which cut across various disciplines in the same university and, if necessary, concerned or interested departments in other universities. In case a project is undertaken jointly by a group of

teachers, one of the teachers will function as the principal investigator and he will be responsible for all matters pertaining to the projects.

During the Fifth Plan period 58 of the 335 advanced research projects have been approved (Appendix XIV) in a number of universities and in a number of disciplines and the Commission has approved a grant of over Rs. 14 lakhs in support of these projects.

SECTION IX

Maintenance and Co-ordination of Standards

The University Grants Commission has taken a number of important steps for the maintenance and co-ordination of standards of teaching, research and examinations, which is one of its important statutory responsibilities. These include payment of grants for the development of universities and colleges, training and orientation of teachers through programmes of summer institutes and seminars etc., provision of essential student amenities and support of short-term and advanced research, as detailed in the earlier sections of the report. The Commission has also initiated a number of measures relating to the new pattern of education, non-formal education, centres of advanced study, COSIP/COHSIP, examination reform, autonomous colleges, subject-panels, publications etc., all of which have a direct bearing on standards. These are reviewed below:

(*i*) *The New Pattern of Education*

The 10+2+3 pattern as suggested in the National Policy on Education and endorsed by the CABE was considered by the Commission. While endorsing this policy for implementation, the Commission in its guidelines for the Fifth Five Year Plan indicated "where students were not desirous of pursuing the postgraduate courses, the pattern of education may vary as considered necessary. Further, the course of two years for the pre-university or intermediate should be administratively separate from the college/university."

The Central Advisory Board of Education at its meeting held in October 1974 expressed the following views:

"The School stage should necessarily cover a period of 12 years and should preferably be divided into 10 + 2. At the undergraduate stage, we may have a pass course of two years and an honours course of three years. Postgraduate course should cover a period of two years after the honours degree. The research degree should take three or more years after the master's degree."

The Commission later reconsidered the adoption of the pattern of 10 + 2 + 3 in the universities in the light of the rethinking that had emerged and endorsed the general pattern of 10 + 2 + 3 for the first degree course. It was visualised that universities would concentrate on 3-year honours courses and that pass courses would generally be offered by colleges. The Commission also endorsed the view that where a university desired to have

a 2-year pass course on the pattern of 10 + 2 + 3, it could do so. In all cases adequate provision should be made available for the graduates who wish to pursue postgraduate studies by offering them suitable 'bridge' or 'link' courses. Colleges where honours courses can be provided should be carefully selected on the basis of facilities and standards maintained by them.

In pursuance of the above decision, the Commission requested the universities in January 1975 that the above views may be kept in mind while drawing up proposals for the Fifth Five Year Plan for different courses.

The University Grants Commission has set up a task force to consider the question of introducing pass, honours and link courses in the central universities and also the problems of organising school and pre-degree classes within the framework of 10 + 2 + 3. The task force would also suggest details of the change-over and the nature of adjustments that would become necessary in the Fifth Plan proposals of the universities.

(*ii*) *Centres of Advanced Study in Humanities and Social Sciences*

During 1963-64 the University Grants Commission initiated a programme of Centres of Advanced Study in Indian Universities with a view to strengthening postgraduate teaching and research by developing a limited number of university departments in selected fields and to encourage the pursuit of excellence and team work and to accelerate the realisation of international standards in these subjects. On the advice of the Standing Committee specially constituted for this purpose 11 Centres of Advanced Study were recognised during 1963-64. In 1968-69 two more centres in Humanities and Social Sciences were recognised.

It was decided that assistance for these centres may be provided for a period of 10 years in the first instance and the question of further assistance be examined in each case on the basis of satisfactory progress and the assessment of the work done by these departments.

The Commission on the basis of the ratings given by the Standing Committee on the basis of Assessment Committee's report, agreed that four Centres of Advanced Study in Humanities and Social Sciences whose work was rated as average should be deleted from its programme with effect from 1st April 1974. A list of the centres functioning presently together with their specializations is given in Appendix XV.

The Commission further decided that the Centres whose work has been rated as excellent or good may be provided continued assistance under

the Centres of Advanced Study Scheme during the Fifth Plan period to enable them to strengthen their teaching and research programmes and the Assessment Committee which evaluated the work of these Centres may be requested to consider their requirements for the Fifth Plan period and make suitable recommendations. The Commission also decided that assistance under this programme in future should be made available only for a period of five years and the State Government/University should take over the recurring liability after the end of this period as committed expenditure.

Programme of Special Assistance to Selected Departments (Humanities and Social Sciences)

In 1972 the Commission initiated a programme of special assistance to selected departments to help them in strengthening and consolidating their teaching and research programmes and to identify an area of specialisation in which they would ultimately strive to achieve excellence. A list of departments in Humanities and Social Sciences which are participating in this scheme since 1972 is given below:

Department	*University*
Economics	1. Osmania University
	2. Presidency College, Calcutta
History	3. Patna University
Sociology	4. Saugar University
	5. Bombay University
Archaeology	6. Poona University (Deccan College Postgraduate & Research Institute, Poona)

It has been decided that assistance to these departments may be made available upto the end of the Fifth Plan period provided the State governments agree to take over the recurring liability after the end of the Fifth Plan period. The work of the departments would also be assessed prior to the end of this period.

(*iii*) *Centres of Advanced Study (Science Subjects)*

Fifteen Centres in science subjects (out of 17) which completed the 10 year period as Centres were visited by Assessment Committees appointed by

the Commission to evaluate their achievements during the period. On the basis of the reports of the Assessment Committees and the advice of the Standing Advisory Committee for the programme, the Commission decided that three centres whose work was rated as average may be removed from their programme. In the case of other twelve centres whose work was judged as good or excellent, it was decided to continue assistance during the Fifth Plan period. A list of the Centres of Advanced Study in science subjects is given in Appendix XVI.

The Commission further decided that the recurring liability of all the centres which have completed the 10 year-period should be taken over by the concerned State governments with effect from 1st April, 1974.

Pending consideration of the Fifth Plan proposals of the centres, it was decided to provide basic grants for purchase of equipment and books & journals.

Special Assistance to Selected Departments (Science)

The Commission continued to provide assistance to selected science departments under this programme. The programme was initiated in 1972 and the Commission's assistance for recurring items was to be provided upto 1977. It was decided to extend assistance for the purpose to the entire Fifth Plan period provided the concerned University/State government agrees to take over the recurring liability after this period.

(iv) College Science Improvement Programme (COSIP)

The College Science Improvement Programme was initiated by the UGC in 1970–71 to accelerate the development of science capabilities of predominantly undergraduate colleges.

College Science Improvement Programme is an attempt at fundamental renewal of precisely normal daily programme of science education for all the students. This renewal demands imagination and creative effort. In practice, improvement of teaching technology and reorientation of staff thinking is at the heart of COSIP.

The College Science Improvement Programme has been taken up at two levels (a) *in selected colleges to include the entire science faculty, and (b) university leadership project in any one science subject in all the colleges affiliated to a university.*

The important activities undertaken by the selected colleges are as under :

(i) To make a determined effort to introduce new methods of instruction in the class room as well as in the laboratories, reduce formal instruction to the minimum and to release necessary time to enable the students to undertake reference work and study on their own with the necessary guidance given by the teachers.

(ii) To teach science in a better way by adopting new teaching technology and to set in motion processes which may ultimately help the university to revise the syllabi and examination methods.

(iii) To ensure student participation in discussions, seminars, project work and wherever possible in teaching as well.

(iv) To provide opportunities for college teachers to obtain additional training through various refresher programmes to be developed by the universities for this purpose.

(v) Improvement of laboratory equipment and providing for necessary demonstration material to revise courses and for adoption of new teaching methods.

(vi) To design and fabricate equipment required for supporting instructional programmes by the development of their workshop facilities.

(vii) To establish inter-departmental and inter-collegiate programmes for uplifting science education at the undergraduate level.

(viii) To devise special programmes to enable gifted science students to develop their innate talents and for their development into professional scientists.

(ix) To encourage students' power of reasoning, logic and spirit of enquiry essentially required for science.

University Leadership Projects (COSIP-ULP) in Science subjects

The University Leadership Project is primarily aimed at improvement of instruction in a selected subject in all the colleges affiliated to a particular university. The department concerned in the selected university provides the necessary guidance, advice and assistance to its college departments regarding improvement of science instruction including subject matter and

methods of instruction, syllabi and courses of study, laboratory facilities, equipment, workshop, library and other teaching materials.

The scope of activities under the university leadership project of the college science improvement programme relates to the following:

1. Development of courses of study and curricula including writing of suitable books, teachers' guides and laboratory manuals;

2. Equipping college laboratories with necessary apparatus for practical and demonstrations;

3. Bringing up of college libraries to the level required to support the academic instructional programmes;

4. Training of teachers for the colleges by running short term institutes, refresher courses or academic year institutes, whereby all the teachers in the subject concerned in the affiliated colleges could be trained to adopt new materials within a course of two or three years;

5. Encourage teachers from the colleges having research aptitude to participate actively in the research programmes undertaken in the university department. Such teachers may be given suitable short term research fellowships on the condition that they would ultimately return to their college departments.

6. Development of educational materials—books, scientific equipment, guides, audio-visual aids.

During the IV Plan period, 25 university science departments and 111 colleges were invited to participate in this programme ; out of these 11 university leadership projects and 79 college projects have completed their first phase programme. These have been evaluated by expert committees. The proposals for follow-up activities during the next two years have been invited from these institutions. It has been decided that the follow up proposals should be mainly for consolidation of activities of phase I and development of materials to bring them to a production stage. The universities are required to ensure that reforms in teaching methods and examination etc. developed under the COSIP-ULP would be implemented by them in consultation with their Boards of Studies/Academic Council etc.

The proposals for follow up activities from the colleges are being examined in the light of the report of the work done earlier and recommendations of regional committees, if these colleges have been visited by them.

During the Fifth Plan period it is proposed to cover under this programme, all the colleges having an enrolment of more than 300 in B.Sc. classes (200 if it is two-year degree course) and all the major science subjects in most of the affiliating universities. Proposals have been invited from 26 university departments and 76 colleges for participating in the programme.

College Humanities & Social Sciences Improvement Programme (COHSIP)

Based on the experience of implementation of College Science Improvement Programme since 1971–72, the Commission initiated, during 1974–75, a similar programme for Improvement of Humanities and Social Sciences instruction in colleges (COHSIP). For the present, only selected colleges have been invited to participate in this programme.

Under the scheme a grant upto a maximum of Rs. 3 lakhs is made available to the colleges for a period of three years for strengthening teaching, initiating tutorial and seminar work, preparing reading materials and bibliographical notes and for introducing internal assessment. The colleges will supplement their teaching with the help of additional staff appointed for the purpose, postgraduate and research students on the rolls of the colleges and guest lecturers from other colleges or the universities. 69 colleges were selected for support under this scheme. It is expected that the number will increase to about 100 during the next academic session.

Selection of colleges for participation in this programme is determined, inter-alia, on the basis of their excellence in (i) the quality of their staff, (ii) student-teacher ratio, (iii) examination results, (iv) strength of their libraries and (v) the quality of their proposals.

This programme provides opportunities for change and innovation within the framework of the existing system, for modernising and up-dating the syllabus in cooperation with the concerned academic bodies of the universities and for giving a practical orientation to teaching and learning. More specifically, the programme is designed to (i) enable the students to study the subject matter in greater depth and to participate directly in the teaching-learning process, (ii) to help them use all available tools and techniques of analysing problems thrown up in the course of their studies, and (iii) to foster a spirit of enquiry and testing of knowledge. It is hoped that such measures will ultimately lead on to the development of courses relevant to national and regional priorities and to the needs of students. Support given by the Commission and the new measures adopted by the colleges will prepare them eventually for autonomy within the university system.

A conference of some 40 college principals was organised in December 1974 to identify the general principles which should guide the implementation of this programme.

Internal assessment is one of the important components of the programmes, even if there is no provision for it in the final examination of a given university.

Special efforts are being made to improve the reading habits of students and teachers. Reading materials available in English will be translated into regional languages and given to students.

The colleges will undertake every year a rigorous self-evaluation of the programme.

It is proposed to invite some selected university departments to establish channels of communications with these colleges, to prepare for them necessary reading and instructional materials and to undertake special faculty improvement programme for them. This programme will be implemented in the next academic session when the Commission will have assessed the working of the programme during its first year. The colleges will soon have the guidance and advice of regional committees of experts to be appointed for the purpose.

(v) *Autonomous Colleges*

One of the significant programmes in the Fifth Five Year Plan for development of colleges is to identify a number of colleges which have good students, good teachers, good facilities and good management and give them an autonomous status to include freedom in matters of admissions, selection of staff, framing of courses of studies and conduct of examinations etc. This will help to make the education system more diversified, flexible and relevant to local, regional and national needs. It will also help to develop good facilities on a district level. Such autonomous colleges are to be selected only on the basis of their academic performance and ability to assume added responsibilities as also to provide quality education at the district level.

The guidelines suggested by the UGC to select such colleges include the following:

(i) A long record of excellent performance;
(ii) Adequate facilities, libraries, laboratories and staff;

(iii) Academically viable and administratively feasible student population;
(iv) Good teacher-pupil ratio.

Though a number of universities have statutory provisions for according autonomy to colleges affiliated to them, the idea of granting autonomous status to colleges has been slow to develop as the true dynamics and significance of autonomous colleges have not been fully appreciated by many. A series of discussions through various forums and four regional workshops at Madurai, Ahmedabad, Chandigarh and Bhubaneswar have been held on the concept of autonomous colleges.

A number of universities are considering the question of autonomy for selected affiliated colleges and helping them to formulate detailed proposals outlining the objectives, plans and programmes that would be undertaken by them consequent upon their being given the autonomous status.

(vi) Examination Reform

The University Grants Commission in August 1972 endorsed the Plan of Action on Examination Reform prepared by an Expert Committee in 1971–72. The Plan of Action was circulated to the universities in August 1973 and they were requested to give their comments and suggestions on the report and to indicate the steps taken by them to implement the recommendations. An Implementation Committee to advise the Commission on various measures of examination reform was appointed in March 1973.

The various issues involved in examination reform were discussed at zonal workshops held at Madurai (for universities in the Southern Zone from July 25 to 27, 1974) at Ahmedabad (for universities in the Western Zone from August 3 to 5, 1974) at Chandigarh (for universities in the Northern Zone from September 16 to 18, 1974) and at Bhubaneswar (for universities in the Eastern Zone from November 26 to 28, 1974). These workshops have created a greater interest among the universities for undertaking measures of examination reforms and have also enabled us to clarify the various issues with particular reference to internal assessment, question banks and grading.

It is now proposed to have regional meetings at some selected universities, e.g., Panjab, Delhi, Bombay and Madras so that the grading system may be adopted in the universities within the region on a uniform basis.*

* These workshops were held during 1975-76 and a consolidated report on the recommendations was circulated to the universities for implementation. Workshops on Grading have also been held at Jabalpur and Calcutta.

The following universities were initially selected for the purpose of initiating examination reform work there:

1	Andhra	7	Madras
2	Aligarh	8	Mysore
3	Baroda	9	Panjab
4	Calicut	10	Poona
5	Gauhati	11	Rajasthan
6	Jadavpur	12	Saugar

The Commission has also agreed to provide assistance to the Banaras Hindu University, Sardar Patel University, Agra University and Gujarat University towards seminars and workshops and/or monitoring unit.

These universities have already taken a number of steps for improving their examination system, especially in regard to internal assessment. The progress of reforms in regard to the development of question banks and grading is also picking up. Other universities have also taken up measures of examination reform in the light of the recommendations in the Plan of Action. The position is indicated below:

Internal Assessment

According to information available with the UGC, internal assessment had been introduced by 33 universities as on 1.4.1975. Twenty one of these universities viz., Aligarh, Andhra, Berhampur, Calicut, Gauhati, Jadavpur, Jawaharlal Nehru University, Madurai, M.S. University (Baroda), Meerut, Jammu, Poona, Saugar, Sardar Patel University, SNDT Women's University, Udaipur, Utkal, Visva-Bharati, G.B. Pant University of Agriculture & Technology, J.N. University of Technology, and Roorkee have a weightage of 20 per cent or more for internal assessment.

Question Banks

Question banks have so far been developed by the Calicut University for the pre-university course and the first year of the degree course, Poona University for Physics, and Sardar Patel University for the pre-university course. The Rajasthan University has held a number of workshops for developing question banks for the undergraduate examination in Arts, Science and Commerce. The question banks are proposed to be developed by the universities of Agra, Aligarh, Andhra, Gauhati, Meerut, Mysore, Panjab and Gujarat.

Grading

Grading has been introduced by the universities of Andhra (for B.E. and B. Tech. degree courses), Baroda (some faculties), Saugar and Jadavpur

(faculties of Science, Engineering and Technology) and has been accepted 'in principle' by Agra, Aligarh, Calicut, Banaras, Delhi, Poona, Gujarat, Bombay, Sardar Patel and Rajasthan universities.

The system of grading is also in vogue in the Birla Institute of Technology & Science, Pilani, the Central Institute of English and Foreign Languages, Hyderabad, the Jawaharlal Nehru University and the agricultural universities and the engineering faculties of a number of universities.

(vii) Norms for the Introduction of Postgraduate Courses in Colleges

The Commission has been concerned for sometime past with the starting of postgraduate courses in colleges which do not have the requisite academic and physical facilities. The courses are also started without proper assessment of the manpower requirements and survey of needs. The Commission, therefore, appointed a committee to finalise the norms for the introduction of postgraduate courses in colleges. The committee made recommendations regarding the introduction of postgraduate courses in Humanities and Social Sciences and in Science subjects. The Commission accepted the recommendations which *inter-alia* provide for the following:

Humanities and Social Science Departments

(a) A college may be allowed to start postgraduate courses in a subject only when there is persistent demand for teaching in that subject and enrolment of a minimum number of students every year is ensured. Opening of a new postgraduate class should be invariably linked with the manpower needs of the region. The college must be permanently affiliated and should have shown consistently good results at the undergraduate level during the last five years.

(b) A minimum of four teachers recognised by the university as postgraduate teachers be appointed at the initial stage. The staff may be increased gradually depending upon the increase in the hours of work and the introduction of the special papers.

(c) It should be laid down that only those persons would be recognised for postgraduate teaching who have some papers to their credit in standard research journals.

(d) Postgraduate courses need not necessarily be started only in such subjects which are taught at the degree level in the affiliated colleges. Interdepartmental, interdisciplinary courses may be preferred.

(e) A college department should have adequate material and other equipment. The departmental library should have enough copies of recommended books and at least three standard journals published during the last 10 years. For books and journals the college should provide per department not less than Rs. 15,000 as non-recurring and Rs. 5,000 p.a. as recurring.

(f) The college should provide a fixed amount every year, not less than Rs. 5,000 for development of research activities in the department.

Science Departments

(a) A department seeking affiliation for starting/running postgraduate classes should have at least six teachers with post-M.Sc. qualifications such as M.Phil or research experience as evidenced by publications. Further, at least three such teachers should have a Ph.D. degree or research publications of equivalent standard.

(b) It will also be essential for such departments to have at least one viable research programme undertaken by the staff members.

(c) Similarly, before any particular specialisation in the subject can be offered as special paper at the M.A./M.Sc. level, there should be on the staff of the department at least two persons who are qualified in that special discipline.

(d) Generally an intake of 15 students should be considered as an optimum size for a unit of postgraduate class.

The norms have been circulated to the universities for their information and guidance.

(*viii*) *Curriculum Development in the Humanities and Social Sciences in the Universities and Colleges*

In February 1974, the Commission constituted Panels in various university disciplines in the Humanities and Social Sciences to advise the Commission on matters relating to the development of teaching and research in their respective areas.* Since then, the Panels have met three times and have generally reviewed the undergraduate and postgraduate courses offered at present in the universities and colleges. There is consensus that the courses need to be thoroughly revised and upgraded.

* A list of the UGC Subject Panels in Humanities and Social Sciences is given in Appendix XVII.

In their meetings held in September-October, 1974, the Panels suggested that regional workshops may be organised at different university centres in the country to suggest measures for upgrading and modernising the syllabus and for bringing it nearer to the needs of the society and students. The Commission has accepted this recommendation and the Panels have started preparatory work for these workshops. A few panels have actually finalised their approach papers and supplementary materials for the consideration of the workshops. A few others have given broad indications of the pattern of courses which might be developed to replace the present curriculum.

The Panels have suggested the organisation of 36 workshops in various disciplines and at different university centres. It is expected that these workshops will be held from September 1975 to June 1976. An attempt will be made to involve all university teachers who have a decisive say in bringing about changes in university curriculum. It is expected that as a result of the deliberations of the workshops, concrete recommendations and guidelines will be available for developing curriculum in various disciplines. The workshops will indicate measures for relating each specific discipline with social reality of the world in general and our own country in particular. The workshops will also provide guidelines for the preparation of relevant text-books, supplementary reading materials and teaching aids in each discipline.

The final recommendations of the workshops are likely to be available to the Commission in the academic year (1976–77).

One of the main recommendations made by the History Panel and accepted by the Commission at its meetings held in September/October, 1974 relates to the question of developing museums and providing audio-visual aids to the departments of History/Archaeology during the current plan period. The panel has also recommended that in order to promote studies in the History of Science, assistance for appointment of a Reader/Lecturer and for books and journals may be provided by the Commission to about four universities, to be selected on regional basis outside the plan allocation. The teaching of History of Science may be introduced at M.A. level by providing one or two optional papers in the History of Western/Indian Science.

(*ix*) *Correspondence Courses*

The objective of correspondence education is to provide an alternative method of education to enable a large number of persons with necessary aptitude to acquire further knowledge and improve their professional competence. Correspondence courses are thus intended to cater for (a) students

who had to discontinue their formal education owing to pecuniary and other circumstances, (b) students in geographically remote areas, (c) students who had to discontinue education because of lack of aptitude and motivation but who may later on become motivated, (d) students who cannot find a seat or do not wish to join a regular college or university department, although they have the necessary qualifications to pursue higher education and (e) individuals who look upon education as a life-time activity and may either like to refresh their knowledge in an existing discipline or to acquire knowledge in a new area.

During 1974–75, 12 universities were offering Correspondence Courses at various levels as indicated below:

University	*Correspondence Courses Offered*
Delhi	B.A. (Pass), B.Com. (Pass)
Rajasthan	B.Com., M.A.
Punjabi	Pre-university, B.A., M.A.
Mysore	Pre-university, B.A., B.Com., M.A.
Meerut	B.A.
Madurai	Pre-university, B.A., B.Com.
Bombay	I.A., I.Com., B.A., B.Com.
Panjab	Pre-university, B.A., B.Com.
Andhra	Pre-university, B.A., B.Com.
Himachal Pradesh	Pre-university, B.A., M.A., M.Ed.
Sri Venkateswara	B.A., B.Com.
Utkal	I.A., B.A.

The Commission utilised the year 1974–75 for laying down guidelines for the introduction of Correspondence courses at the undergraduate and postgraduate levels so that standards may be maintained at a high level and the schools and institutes of Correspondence Courses may be able to break new ground. A meeting of the Directors of Correspondence Courses was organised at the University of Delhi on 10th, 11th and 12th October 1974. The Standing Committee on part-time education considered the guidelines. The Commission also accepted the guidelines which *inter-alia* provide that:

(a) Ordinarily, Correspondence Courses at the undergraduate level should be introduced by only one university in a State except when a University proposes to introduce Correspondence Courses in a new faculty at the undergraduate level or when the University already offering Correspondence

Courses reaches the optimum size (say an enrolment of 10,000) or for other valid reasons.

(b) Correspondence courses should be started only by universities which have well-established teaching departments noted for their high standards for in the absence of good teaching departments, standards are likely to suffer. The academic responsibility for the contents of the Correspondence Course in any given subject and its standard, must be taken by the corresponding subject department in the university.

(c) It should be compulsory for every student enrolled in correspondence course to return a certain number of response sheets, say 20 every year suitably spread over various subjects.

(d) High priority should be given to the setting up of study centres in areas where there is a concentration of students.

(e) The provision of contact programmes should be an essential feature of correspondence courses in order that the mind of the student is exposed to the mind of the teacher through lectures, tutorials, seminars and other forms of discussion.

(f) Grants for the introduction of correspondence courses at the undergraduate level should be earmarked for such programmes as contact programmes, study centres, writing of lessons, core staff and library facilities.

(g) Correspondence courses at the postgraduate level should be started only in those universities which have experience of running undergraduate correspondence courses properly for atleast three years. The basis of grants and assessment by visiting committees would be the same as at the undergraduate level but the ceiling of UGC assistance will be Rs. One lakh per subject per annum for a period of five years. The grants should be for core staff, preparation of reading materials, contact programmes, provision of visiting lecturers, books and journals and postal library services.

The proposals received from the universities for the introduction of correspondence courses are being processed in the light of the guidelines.*

(*x*) *Continuing Education Programmes in the Universities*

The University Grants Commission considered in 1971 the general pattern of development and assistance towards Adult Education programmes

* The proposals of Jammu, Kashmir and Allahabad universities for the introduction of correspondence courses were accepted during 1975-76.

in the universities and agreed to provide assistance to the universities for this purpose on 75: 25 basis upto a maximum of Rs. 3 lakhs to a university during the Fourth Plan period.

In August 1973, the Commission decided to extend the period of assistance for setting up of departments of Continuing/Adult Education in the universities till the end of the Fifth Five Year Plan.

The Commission also agreed that the programme of Adult Education may include the following:

(a) Professional courses
(b) Courses for human relations, leadership and management skills
(c) General purpose courses
(d) Programme for the rural community
(e) Cultural activities
(f) Training of personnel
(g) Research in Adult Education.

The universities were requested to send proposals for the development of Adult/Continuing Education programme during the Fourth Plan period. Proposals received from 13 universities were approved by the Commission. However, only ten universities (including an institution deemed to be a university) found it possible to initiate the programme. These universities are:

(1) Andhra University, Waltair
(2) Bombay University, Bombay
(3) Gujarat University, Ahmedabad
(4) G.B. Pant University of Agriculture & Technology, Pantnagar
(5) Gujarat Vidyapith, Ahmedabad
(6) M.S. University, Baroda
(7) Poona University, Poona
(8) Rajasthan University, Jaipur
(9) SNDT Women's University, Bombay
(10) Sri Venkateswara University, Tirupati.

A grant of Rs. 2,72,000 was paid to the universities in 1974–75 for the implementation of the programmes of Adult/Continuing Education.

(*xi*) *Restructuring of Courses—Their Relevance to Development—Rural Orientation*

The University Grants Commission has been considering, for some time past, the question of the restructuring of university courses at the first degree level so as to make them relevant to the rural environment and to the developmental needs of the community and, with this end in view, to give a practical or field orientation also. The Commission is of the view that special attention needs to be given to the orientation of the existing courses towards rural problems, without creating a completely different channel for such studies.

The Commission, with the help of an expert committee, has formulated a set of guidelines for the introduction of such courses of study. The Commission has also selected some universities on a regional basis to take lead in regard to the re-structuring of courses and to act as pace-setters in this important area of education reforms and innovation. These universities are (1) Fanjab, (2) Meerut, (3) Berhampur, (4) Sambalpur, (5) North Eastern Hill (6) Kalyani, (7) Burdwan, (8) Jodhpur, (9) Gujarat, (10) Marathwada, (11) Ravi Shankar (12) Osmania, (13) Karnatak, (14) Madurai, (15) Calicut, (16) Jammu, (17) Kashmir, and (18) Himachal Pradesh University. The essential features of the guidelines are given below:

(a) Within the general principles of relevance and flexibility there is an immediate need for combining the "academic component" of courses with some sort of "applied components" suited to the real problems and "work experience" situations faced and felt in the different regions and especially the rural areas of the country. This implies a good deal of integration and broad reframing of courses at the degree level to give them a practical and rural orientation and can be attempted not only in science subjects but also in the field of social sciences.

(b) This implies a re-orientation of traditional subjects to the needs of the rural community and the introduction of some relevant applied disciplines related to basic subjects or subject groups.

(c) The courses are to be reoriented in such a manner that a student can apply his theoretical knowledge to the problems of the region through field work, project work, extension, etc. In other words, the existing conventional courses may be integrated with concrete problems and the courses related to the development of the region.

(d) The scheme has essentially to be implemented within the existing resources of the university/college but the UGC would support the prog-

ramme by providing assistance for the purchase of equipment, setting up of workshops and laboratories, pilot plants etc. and for the purchase of books and journals and appointment of extra staff on the merit of each proposal.

The proposals received from the universities and colleges are being processed with the help of a Sub-Committee.

(*xii*) *Area Studies Programme*

During the Fourth Plan, the University Grants Commission agreed to provide assistance to the following universities for undertaking programmes of Area Studies:

S. No.	*University*	*Area of specialisation*
1.	Jadavpur	Pakistan, South-East-Asia including Indonesia and Malaysia
2.	Bombay	East-Africa and USSR
3.	Madras	Ceylon, Burma and Malaysia
4.	Delhi	African Studies, China & Japan Studies, Pakistan Studies
5.	Aligarh Muslim	West Asia
6.	Sri Venkateswara	Indo-China
7.	Rajasthan	South Asia
8.	Poona	Latin American Studies

The programmes envisage intensive course in languages of the area concerned and inter-disciplinary collaboration specially in the field of social sciences.

The Standing Advisory Committee in August 1974 recommended as follows:

(i) Special programmes of depth study on an inter-disciplinary basis may be developed on a selective basis and may include both research and training. Assistance for field trips, fellowships and books and journals be provided to the selected Centres for this purpose.

(ii) Programmes of research and studies based on one or more disciplines in the specified areas may be developed. The study should include development of society and culture and also contemporary developments in the concerned country/region.

(iii) The possibility of introducing optional courses at post-degree level on some aspect of chosen region/country after adequate preparation, may be considered.

(iv) The programme of Area Studies may be developed and strengthened in the specified areas as indicated below:

1.	Jadavpur University	The Centre may concentrate its studies and research primarily on Indonesia and to some extent, on Thailand and Burma. The focus of all studies should be international affairs which is the special competence of the present department.
2.	Bombay University	The Centre may concentrate its studies and research on East Africa.
3.	Madras University	The main emphasis of the centre should continue on study and research on Malaysia and Sri Lanka in the Economics Department of the university. Courses in the economics of the two countries may be developed at appropriate levels. Studies and research on these two countries need not branch out into other disciplines at this stage. This could be considered when other departments show some interest.
4.	Delhi University	(a) Studies and research on West Africa may be undertaken. (b) Area Studies on China should be the main emphasis in the university and this centre should be given adequate support. (c) Pakistan Studies may be developed in the Departments of Sociology and Economics.
5.	Aligarh Muslim University	The Centre may undertake special studies and research on Egypt, Saudi Arabia, Iraq, Yeman, Oman and Iran.
6	Sri Venkateswara	The History Department of the university may continue to concentrate on the history of Indo-China. Facilities for teaching of the French language, library and documentation could be developed further. Research projects with field work orientation may not be taken up at this stage.

7.	Rajasthan University	The Centre may be advised to implement its programme of studies and research on South Asia with main focus on comparative study of governments and politics.

The committee recommended that new centres may be established at the following universities during the Fifth Plan:

(a) Visva-Bharati—Classical Chinese Art, Culture and Philosophy of China.

(b) Poona University—Economics of East European countries.

(c) Banaras Hindu University—Nepal

(d) Calicut University—Malaysia

(e) Goa Centre—Latin American Countries.

The Standing Committee further recommended that basic grant for books and journals may be sanctioned by the Commission to the existing centres so that they may meet their immediate requirements pending assessment of their proposals for development during the Fifth Plan period.

The University Grants Commission generally accepted the recommendations of the Standing Committee on Area Studies and also agreed to provide basic grants to the universities for books and journals.

(xiii) Development Programmes of University Education Departments and Teacher Training Colleges

The Commission informed the universities that in their proposals for Fifth Plan they may include within their respective allocations, programmes for the development of Teacher Education Departments during the Plan period. The Panel on Teacher Education is closely examining the observations and recommendations of the Fifth Plan Visiting Committees in regard to the development of Teacher Education Departments with a view to locating the growth points and identifying those departments which could be considered for a special support.

The Panel on Teacher Education at its first meeting held on 27th July 1974 suggested that a series of workshops may be organised for modernising and upgrading the curriculum of undergraduate and postgraduate courses in education. The workshops would consider the orientation and content of the B.Ed. courses and the level of theoretical and practical learning required at each level.

During the Fourth Plan period, the Commission provided assistance upto Rs. 2 lakhs to a teacher training college providing B.Ed. courses and upto Rs. 3 lakhs for a college providing both B.Ed. and M.Ed. courses. The Commission had requested the Panel on Teacher Education to indicate the purpose and the sharing basis on which assistance may be provided to these colleges within a ceiling of Rs. 1.5 lakhs as UGC contribution for the Fifth Plan. The Commission has also agreed that the minimum enrolment eligibility condition for such colleges may be 100.

(*xiv*) *Book Production*

The Ministry of Education and Social Welfare in consultation with the University Grants Commission had initiated in 1960 programmes for reprinting of books in low priced editions, originally published in USA, UK and USSR and used by university and college students. Presently, there are three such programmes viz., Joint Indo-American standard work programme, English Language Book Society Series (ELBS) and Joint Indo-Soviet Text Book programme. Suggestions regarding the books that may be published under any of these programmes are made by specialists in the subject concerned from India as well as the respective countries. The Ministry of Education and Social Welfare receives such suggestions as also copies of the books and in turn refers them to the University Grants Commission for getting them evaluated from the standpoint of their suitability to Indian University and College students. The Commission's role is that of getting the books evaluated with the help of experts in the subjects concerned in the universities and other educational institutions.

The University Grants Commission got evaluated 45 books during the year 1974–75 as detailed below:

S. No.	*Programmes*	*No. of titles evaluated*
1.	Joint Indo-American Standard Works Programme	19
2.	E.L.B.S.	25
3.	Joint Indo-Soviet Text-Book Programme	1
	Total	45

In co itation with the Ministry of Education and Social Welfare, the Universit rants Commission initiated in 1970–71 the scheme for prepa-

ration of university level books by Indian authors. Upto 31st March 1975, 309 projects had been selected for preparation of books in various fields of Science and Humanities under this scheme. At present 231 projects are in different stages of progress, while 33 manuscripts have been completed. An expenditure of Rs. 8,68,875 was incurred during 1974-75 under this scheme.

(xv) *Publication of Learned Research Works/Doctoral Theses*

The Commission appointed a Committee to review the implementation of the scheme of financial assistance to universities for the publication of learned works/doctoral theses. The main recommendations of the Committee are given below:

(i) The scheme should be continued during the Fifth Plan for the universities and for colleges. Assistance may be given to all universities for publication of learned works etc.

(ii) A learned research work to be assisted under the scheme should be one that breaks new ground and is useful as reference material for honours and postgraduate studies. The manuscripts in respect of works brought out by college teachers may be sent to UGC for assessment by two experts in the particular field. While the college part of the scheme may be done centrally in the UGC, the university part may be entrusted to each university as at present.

(iii) Theses accepted for doctoral degree may be considered for assistance for publication under the scheme only within a period of ten years after its submission. If the period of submission exceeds ten years then it should be got adjudged by the experts in the field by the university before it is considered for assistance.

(iv) It was felt that a specific ratio of assistance be fixed for assistance for learned research works and doctoral theses. The allocation made to a university under the scheme be utilised by the universities normally on the basis of 2/3rd for doctoral theses and 1/3rd for other learned research works.

(v) Repetitive publication should not be considered under the scheme for assistance. Assistance would be available once only for the initial publication.

(vi) A special permanent fund may be established at some selected universities for the publication of research work. The Commission may make

a lump-sum grant of Rs. one lakh for the plan period and university may add Rs. 50,000 to this fund.

The Commission has allocated grants to 80 universities ranging from Rs. 10,000 to 60,000 to each university for the purpose for two years viz., 1975–76 and 1976–77.

(*xvi*) *Development of Centralised Facilities*

Advanced training and research programmes in universities and colleges demand adequate facilities of general and sophisticated instrumentation, workshop and library services. While it should be expected that each institution should develop such facilities, realisation of this objective is not easy owing to a number of limiting factors, such as, non-availability of such equipment in adequate numbers and of sufficient quality and performance from indigenous manufacturing sources, inadequacy of foreign exchange resources for import of such equipment from other countries and inadequacy of back-up maintenance services. The availability of financial resources and economics of maximum utilization of such equipment and other services have also to be kept in view.

The approach of the University Grants Commission in this regard is discussed below:

(*a*) *Development of Workshop Facilities*

Efforts are being made to provide funds for developing in each university a centralized workshop facility with an optimum level of workshop machines and tools and essential technical and supporting staff. Such workshops, appropriately guided by an inter-departmental or inter-faculty committee of management, could help the user departments to ensure proper servicing, maintenance and repairs of scientific equipment and wherever possible, take up small jobs of design, development and fabrication of scientific equipment as well. With a view to encouraging development of such workshop facilities, the Commission has offered to the universities as well as colleges 100 percent grant during the Fifth Plan period. Necessary guidance and assistance in the manner of development of these workshops could also be made available. The Commission has also agreed that 5 percent of the equipment grant sanctioned by the Commission may be used by the universities for purposes of maintenance and servicing contracts so that equipment purchased is properly maintained and used. Similarly upto 20 percent of the equipment grant can be used for obtaining components, spare-parts, both for existing equipment to ensure that no equipment would remain idle for want of spare-parts and repairs and also to encourage fabrication of equipment indigenously in the universities with the help of workshop facilities available.

(*b*) *Development of Regional Instrumentation Centres*

It is also essential to develop a few regional centres of instrumentation for use by a number of institutions within the region. These regional instrumentation centres, adequately equipped and staffed, and properly maintained could take up some or all of the following activities.

(i) Servicing and maintenance activities
(ii) Service facilities
(iii) Instrumentation development work.

It is proposed that during the Fifth Plan period, upto six such regional instrumentation centres may be established in appropriate locations. These regional centres would have essential inter-faces with the local industries, R & D institutions and the regional offices of the Central Scientific Instruments Organisation of the CSIR. Efforts are also being made to develop these centres in coordination with the Department of Science and Technology, Government of India.

(*c*) *Development of Computer Facilities*

The position in this regard has been reviewed in Section III of the report. The position of availability of computers is given in the statement at Appendix XVIII.

(*d*) *Science Education Centres*

A few Science Education Centres are proposed to be set up in the university system during the Fifth Plan period. The Science Education Centres would have a special concern with the conditions of science education in the country and initiate appropriate activities and programmes for innovations in science education at the school, college and university level and also establish meaningful interaction with the community, society as well as all others interested in creative science. Each science education centre would have a complex of activities designed in a flexible manner to cater to the scientific interests at different levels. Each science education centre would also have several sub-programmes of individualised activities which could be taken up by other universities in the region. Proposals for setting up such centres received from the universities are under consideration.

(*e*) *Regional Library Centres*

It seems necessary to strengthen a few university libraries in the different regions to augment their collections of books and journals including back

volumes and make them available for use by a number of institutions in the region. Such inter-library service would require development of a number of library service facilities, such as, reprography, microfilming and facilities for information storage and retrieval by resort to computerisation etc. Details regarding the development of such regional library centres are under consideration.

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* Note : This report has been signed by the Members of the UGC reconstituted w.e.f. 21.1.1976.

APPENDIX I

Indian Universities and Institutions Deemed to be Universities

(1974-75)

Year of Establishment	*S. No.*	*University*	*Total Enrolment*
1857	(1)	Calcutta University	2,10,122
	(2)	Bombay University	65,822
	(3)	Madras University	1,04,696
1887	(4)	Allahabad University	22,035
1916	(5)	Banaras Hindu University (Varanasi)	15,825
	(6)	Mysore University	59,956
1917	(7)	Patna University	9,301
1918	(8)	Osmania University (Hyderabad)	66,962
1921	(9)	Aligarh Muslim University	8,826
	(10)	Lucknow University	31,325
1922	(11)	Delhi University	77,799
1923	(12)	Nagpur University	61,548
1926	(13)	Andhra University (Waltair)	57,740
1927	(14)	Agra University	65,039
1929	(15)	Annamalai University (Annamalainagar)	5,536
1937	(16)	Kerala University (Trivandrum)	51,344
1943	(17)	Utkal University (Bhubaneswar)	22,425
1946	(18)	Saugar University	21,952
1947	(19)	Rajasthan University (Jaipur)	83,343
	(20)	Panjab University (Chandigarh)	46,049
1948	(21)	Gauhati University	33,110
	(22)	Kashmir University (Srinagar)	14,881
1949	(23)	Roorkee University	1,928
	(24)	Poona University	60,738
	(25)	M.S. University of Baroda	20,441
	(26)	Karnatak University (Dharwar)	40,551
1950	(27)	Gujarat University (Ahmedabad)	90,072
1951	(28)	S.N.D.T. Women's University (Bombay)	9,065
	(29)	Visva-Bharati (Santiniketan)	1,538
1952	(30)	Bihar University (Muzaffarpur)	13,739
1954	(31)	Sri Venkateswara University (Tirupati)	24,316
1955	(32)	Sardar Patel University (Vallabh Vidyanagar)	10,857

Year of Establishment	*S. No.*	*University*	*Total Enrolment*
1955	(33)	Jadavpur University (Calcutta)	5,178
1956	(34)	Kuruksetra University	52,620
	(35)	Indira Kala Sangit Vishvavidyalaya (Khairagarh)	73
1957	(36)	Vikram University (Ujjain)	18,979
	(37)	Gorakhpur University	75,063
	(38)	Jabalpur University	19,938
1958	(39)	Sampurnanand Sanskrit Vishvavidyalaya (Varanasi)	583
	(40)	Marathwada University (Aurangabad)	44,822
1960	(41)	G.B. Pant University of Agriculture & Technology (Nainital)	2,195
	(42)	Burdwan University	55,185
	(43)	Kalyani University	2,107
	(44)	Bhagalpur University	10,094
	(45)	Ranchi University	20,750
1961	(46)	K.S. Darbhanga Sanskrit Vishvavidyalaya	—
1962	(47)	Punjab Agricultural University (Ludhiana)	2,588
	(48)	Punjabi University (Patiala)	21,420
	(49)	Orissa University of Agriculture & Technology (Bhubaneswar)	1,043
	(50)	North Bengal University (Siliguri)	18,089
	(51)	Rabindra Bharati (Calcutta)	3,740
	(52)	Magadh University (Gaya)	16,356
	(53)	Jodhpur University	11,062
	(54)	Udaipur University	8,210
	(55)	Shivaji University (Kolhapur)	47,202
1964	(56)	Indore University	17,444
	(57)	Jiwaji University (Gwalior)	21,555
	(58)	Ravi Shankar Universty (Raipur)	25,528
	(59)	University of Agricultural Sciences (Bangalore)	2,413
	(60)	Andhra Pradesh Agricultural University (Hyderabad)	1,919
	(61)	Bangalore University	30,541
	(62)	Jawaharlal Nehru Krishi Vishvavidyalaya (Jabalpur)	2,267
1965	(63)	Dibrugarh University	11,692
	(64)	Kanpur University	63,846
	(65)	Meerut University	49,492
	(66)	Madurai University	47,864

Year of Establishment	*S. No.*	*University*	*Total Enrolment*
1965	(67)	Saurasatra University (Rajkot)	35,878
	(68)	South Gujarat University (Surat)	22,030
1967	(69)	Berhampur University	5,311
	(70)	Sambalpur University	11,428
1968	(71)	Gujarat Ayurveda University (Jamnagar)	2,474
	(72)	Jawaharlal Nehru University (New Delhi)	2,120
	(73)	Mahatma Phule Krishi Vidyapeeth (Rahuri, Distt. Ahmednagar)	1,791
	(74)	Calicut University	26,577
	(75)	Awadesh Pratap Singh University (Rewa)	12,612
	(76)	Assam Agricultural University (Jorhat)	655
1969	(77)	Guru Nanak Dev University (Amritsar)	34,475
	(78)	Jammu University	9,496
	(79)	Panjabrao Krishi Vidyapith (Akola)	2,261
1970	(80)	Haryana Agricultural University (Hissar)	1,480
	(81)	Himachal Pradesh University (Simla)	12,339
	(82)	Bhopal University	15,868
	(83)	Rajendra Agricultural University (Dholi, Distt. Muzaffarpur)	1,157
1971	(84)	Tamil Nadu Agricultural University (Coimbatore)	2,110
	(85)	Cochin University	267
1972	(86)	Kerala Agricultural University (Trichur)	513
	(87)	Gujarat Agricultural University (Ahmedabad)	1,860
	(88)	Konkan Krishi Vidyapith (Dapoli)	560
	(89)	Marathwada Krishi Vidyapith (Parbani)	932
	(90)	Lalith Narayan Mithila University (Darbhanga)	11,366
	(91)	Jawaharlal Nehru Technological University (Hyderabad)	2,970
1973	(92)	North Eastern Hill University (Shillong)	5,091
	(93)	Kumaon University (Nainital)	3,267
	(94)	Garhwal University (Srinagar-Garhwal)	9,883
1974	(95)	Kashi Vidyapeeth (Varanasi)	2,002
	(96)	Bidan Chandra Krishi Visvavidyalaya (Kalyani)	1,020
	(97)	University of Hyderabad	—
	(98)	Acharya Narendra Dev University of Agriculture & Technology (Faizabad)	—

Year of Establishment	*S. No.*	*University*	*Total Enrolment*
1974	(99)	Chandra Sekhar Azad University of Agriculture & Technology (Kanpur)	—
1975	(100)	Avadh (Faizabad)	—
	(101)	Bundelkhand (Jhansi)	—
	(102)	Rohilkhand University (Bareilly)	—

Note : (1) The universities have been arranged according to the year in which the respective Acts were adopted. The position shown above is upto 31. 3. 75.

(2) The enrolment figures which include the enrolment in constituent/affiliated colleges of the universities generally indicate the position as on August 15, 1974. The figures for Indira Kala Sangit Vishwavidyalaya, Rabindra Bharati and Sampurnanand Sanskrit Vishwavidyalaya relate to the respective university campuses only. The data is not available in the case of K. S. Darbhanga Sanskrit Vishwavidyalaya. In the case of some colleges, the data for the previous year have been used.

(3) Enrolment figures have not been furnished in the case of new universities viz., Hyderabad, Acharya Narendra Dev University of Agriculture & Technology (Faizabad), Chandra Sekhar Azad University of Agriculture & Technology (Kanpur), Avadh, Bundelkhand and Rohilkhand as they were set up after 15. 8. 74 and some of them had not started functioning. However, the enrolment figures in respect of Avadh, Bundelkhand and Rohilkhand have been included in Gorakhpur. Kanpur and Agra Universities, respectively.

(4) All enrolment figures exclude Pre-University/Intermeditate/Pre-Professional levels.

*Year of recognition**	*S. No.*	*Institution deemed to be university*	*Total Enrolment*
1958	(1)	Indian Institute of Science (Bangalore)	1,055
	(2)	Indian Agricultural Research Institute (New Delhi)	524
1962	(3)	Gurukul Kangri Vishvavidyalaya (Hardwar)	228
	(4)	Jamia Millia Islamia (New Delhi)	951
1963	(5)	Gujarat Vidyapeeth (Ahmedabad)	612
1964	(6)	Tata Institute of Social Sciences (Bombay)	188
	(7)	Birla Institute of Technology & Science (Pilani)	2,057
1967	(8)	Indian School of Mines (Dhanbad)	336
1973	(9)	Central Institute of English & Foreign Languages (Hyderabad)	100
Grand Total			23,66,541

APPENDIX II

Distribution of Colleges according to Courses of Study

(1970-71 to 1974-75)

Courses of Study	*Number of Colleges*				
	1970–71	1971–72	1972–73	1973–74	1974–75
Arts, Science and Commerce	2,587	2,798	2,998	3,126	3,172
Engineering and Technology	107	108	110	109	109
Medicine, Pharmacy, Ayurveda, Nursing and Dentistry	176	186	210	217	226
Law	91	95	107	110	122
Agriculture	57	57	54	55	57
Veterinary Science	23	23	24	25	25
Education	258	269	287	295	307
Oriental Learning	226	272	275	274	269
Others (Physical Education, Music and Fine Arts)	79	88	93	97	101
Total	3,604	3,896	4,158	4,308	4,388

APPENDIX III

Growth of Student Enrolment

(1960-61 to 1974-75)

Year	*Total Enrolment*	*Increase over the preceding year*	*Percentage increase*
1960–61	5,56,559	75,025	15.6
1961–62	6,63,661	1,07,102	19.2
1962–63	7,52,095	88,434	13.3
1963–64	8,42,110	90,015	12.0
1964–65	9,50,277	1,08,167	12.8
1965–66	10,66,884	1,16,607	12.3
1966–67	11,90,713	1,23,829	11.6
1967–68	13,70,261	1,79,548	15.1
1968–69	15,66,103	1,95,842	14.3
1969–70	17,92,780	2,26,677	14.5
1970–71	19,53,700	1,60,920	9.0
1971–72	20,65,041	1,11,341	5.7
1972–73	21,68,107	1,03,066	5.0
1973–74	22,34,385	66,278	3.1
1974–75	23,66,541	1,32,156	5.9

APPENDIX IV

Student Enrolment: Facultywise

(1972-73 to 1974-75)

Faculty	1972–73		1973–74		1974–75	
	Enrolment	*% of total*	*Enrolment*	*% of total*	*Enrolment*	*% of total*
Graduate	19,20,364	88.6	19,64,432	88.00	20,75,039	87.7
Postgraduate	1,95,307	9.0	2,14,691	9.6	2,34,114	9.9
Research	16,443	0.7	16,417	0.7	17,977	0.8
Diploma/ Certificate	35,993	1.7	38,845	1.7	39,411	1.6
Total	21,68,107	100.0	22,34,385	100.0	23,66,541	100.0

APPENDIX V

Stagewise Enrolment: Universities and Affiliated Colleges

(1974-75)

Stage	*University Departments/ University Colleges*	*Affiliated Colleges*	*Total*	*Percentage in Affiliated Colleges*		
				1974–75	1973–74	1972–73
Graduate	2,05,719	18,69.320	20,75,039	90.1	90.2	90.2
Postgraduate	1,14,014	1,20,100	2,34,114	51.3	51.4	49.4
Research	16,022	1,955	17,977	10.9	12.6	14.9
Diploma/ Certificate	18,101	21,310	39,411	54.1	56.1	58.1
Total	3,53,856	20,12,685	23,66,541	85.1	85.3	85.4

APPENDIX VI

Student Enrolment: Facultywise

(1972-73 to 1974-75)

	1972–73		1973–74		1974–75	
Faculty	*Enrolment*	*% of total*	*Enrolment*	*% of total*	*Enrolment*	*% of total*
Arts (including Oriental Learning)	9,63,044	44.4	10,03,375	44.9	10,56,077	44.6
Science	4,94,599	22.8	4,73,685	21.2	4,63,441	19.6
Commerce	3,18,888	14.7	3,40,392	15.2	3,89,504	16.5
Education	67,848	3.1	70,680	3.2	77,179	3.3
Engineering/ Technology	82,674	3.8	86,665	3.9	90,685	3.8
Medicine	99,643	4.6	1,02,242	4.6	1,06,340	4.5
Agriculture	25,882	1.2	26,520	1.2	29,293	1.2
Veterinary Science	5,954	0.3	6,334	0.3	6,736	0.3
Law	98,855	4.6	1,13,230	5.0	1,34,811	5.7
Others	10,720	0.5	11,262	0.5	12,475	0.5
Total	21,68,107	100.0	22,34,385	100.0	23,66,541	100.0

APPENDIX VII

Strength and Distribution of Teaching Staff in University Departments/ University Colleges according to Designation

(1970-71 to 1974-75)

Year	*Professors*	*Readers*	*Lecturers**	*Tutors/ Demonstrators*	*Total*
1970–71	2139	3324	14,389	1767	21,619
	(9.9)	(15.4)	(66.5)	(8.2)	(110.0)
1971–72	2273	3616	15,296	1657	22,842
	(10.0)	(15.8)	(67.0)	(7.2)	(100.0)
1972–73	2460	3938	16,431	1875	24,704
	(10.0)	(15.9)	(66.5)	(7.6)	(100.0)
1973–74	2539	4295	17,675	2050	26,659
	(9.9)	(16.1)	(66.3)	(7.7)	(100.0)
1974–75	2803	5141	17,700	2186	27,830
	(10.1)	(18.5)	(63.6)	(7.8)	(100.0)

Note : Figures within parenthesis include the percentage of the cadre to the total staff in the corresponding year.

* Including Assistant Professors and Assistant Lecturers.

APPENDIX VIII

Strength and Distribution of Teaching Staff in Affiliated Colleges according to Designation

(1970-71 to 1974-75)

Year	*Senior Teachers**	*Lecturers***	*Tutors/ Demonstrators*	*Total*
1970–71	13,185	80,468	13,604	1,07,257
	(12.3)	(75.0)	(12.7)	(100.0)
1971–72	14,395	88,617	13,350	1,16,362
	(12.4)	(76.1)	(11.5)	(100.0)
1972–73	15,068	91,701	14,051	1,20,820
	(12.5)	(75.9)	(11.6)	(100.0)
1973–74	15,226	1,00,177	14,500	1,29,903
	(11.7)	(77.1)	(11.2)	(100.0)
1974–75	16,396	1,03,456	14,100	1,33,952
	(12.2)	(77.2)	(10.6)	(100.0)

Note : Figures in parenthesis indicate the percentage of the cadre to the total staff in the corresponding year.

* Including Principals.

** Including Assistant Lecturers.

APPENDIX IX

Basic Grants provided to Universities for Purchase of Library Books & Journals and Scientific Equipments

(Rs. in lakhs)

Sl. No.	*University*	*For library books*	*For scientific equipments*
1.	Agra	3	0·5
2.	Aligarh	5	7·5
3.	Allahabad	5	7·5
4.	Andhra	3	5·0
5.	Annamalai	3	5·0
6.	Awadesh Pratap Singh	1	—
7.	Banaras	5	7·5
8.	Bangalore	5	7·5
9.	Berhampur	3	5·0
10.	Bhagalpur	3	5·0
11.	Bhopal	1	—
12.	Bihar	3	5·0
13.	Bombay	5	5·0
14.	Burdwan	3	5·0
15.	Calcutta	5	7·5
16.	Calicut	3	5·0
17.	Cochin	3	5·0
18.	Delhi	5	7·5
19.	Dibrugarh	3	5·0
20.	Gauhati	5	7·5
21.	Gorakhpur	3	5·0
22.	Gujarat	3	5·0
23.	Guru Nanak	3	5·0
24.	Himachal Pradesh	3	5·0
25.	Indore	3	5·0
26.	Jabalpur	3	5·0
27.	Jadavpur	3	5·0
28.	Jammu	3	5·0
29.	Jawaharlal Nehru	5	7·5
30.	Jiwaji	3	5·0
31.	Jodhpur	3	5·0
32.	Kanpur	1	—

Appendix IX (*Contd.*)

1	2	3	4
33.	Karnatak	3	5·0
34.	Kashi Vidyapith	1	—
35.	Kashmir	3	5·0
36.	Kerala	5	7·5
37.	Kuruksetra	3	5·0
38.	Lucknow	5	7·5
39.	Madras	5	7·5
40.	Madurai	3	5·0
41.	Magadh	3	5·0
42.	M.S. Uni. Baroda	5	7·5
43.	Marathwada	3	5·0
44.	Mysore	3	5·0
45.	Meerut	3	5·0
46.	Nagpur	3	5·0
47.	North Bengal	3	5·0
48.	Osmania	5	7·5
49.	Panjab	5	7·5
50.	Patna	5	7·5
51.	Poona	3	5·0
52.	Punjabi	3	5·0
53.	Rabindra Bharati	1	—
54.	Ranchi	3	5·0
55.	Rajasthan	3	5·0
56.	Ravi Shankar	3	5·0
57.	Roorkee	3	5·0
58.	Sardar Patel	3	5·0
59.	Sagar	3	5·0
60.	Sambalpur	3	5·0
61.	Saurashtra	3	5·0
62.	Shivaji	3	5·0
63.	S.N.D.T. Women's	3	0·5
64.	South Gujarat	3	5·0
65.	Sri Venkateswara	3	5·0
66.	Udaipur	3	5·0
67.	Utkal	3	5·0
68.	Varanaseya Sanskrit	1	—
69.	Vikram	3	5·0
70.	Visva Bharati	3	5·0
	Sub Total (A)	230·00	348·50

Appendix IX (*Contd.*)

1	2	3	4
Institutions Deemed to be Universities			
1.	Birla Institute of Technology & Science	3·00	5·00
2.	Gujarat Vidypaith	1·00	—
3.	Gurukul Kangri	0·50	—
4.	Indian Institute of Science	5·00	7·50
5.	Jamia Millia Islamia	1·50	2·00
6.	Tata Institute of Social Sciences	1·00	—
	Sub Total (B)	12·00	14·500
	Grand Total (A+B)	242·00	363·00

APPENDIX X

Pattern of Assistance to Universities during Fifth Plan

S.No.	Scheme/Project	Pattern of assistance	
		Contribution by UGC	*Contribution by State Govt. and/or University*
1	2	3	4
1.	University departments and university postgraduate centres		
	(a) Research/postgraduate and undergraduate (both) facilities		
	(i) Staff: Professor ..	100%	—
	Reader ..	100%	—
	Lecturer ..	75%	25%
	Technical staff	100%	—
	(ii) Equipments ..	100%	—
	(iii) Books ..	100%	—
	(iv) Buildings (Teaching & Laboratories)	50%	50%
	(v) Workshop (including shed)	100%	—
	(vi) Animal house facility	100%	—
	(b) University departments which are centres of advanced study	100%	
	(c) Programme of special assistance for selected departments	100%	
2.	Engineering and Technology (university departments/institutions)		
	(a) Development/expansion of undergraduate and diploma courses NR & R)		

1	2	3	4
	(b) Postgraduate/research facilities (c) Research and Junior Fellowships in Engineering and Technology	*Under review*	
3.	Libraries		
	(a) Buildings ..	50%	50%
	(b) Books ..	100%	—
	(c) Professional staff ..	50%	50%
4.	Summer Institute, Seminars, Symposium, Refresher/orientation course, Workshop etc. ..	100%	—
5.	Conferences of professional/learned/academic bodies/associations	*Under review*	
6.	Utilisation of the services of retired teachers	Rs. 6,000 p.a. and Rs. 1,000 p.a. for contingencies	
7.	Research and learned work by teachers (equipment, field work, literature etc.)	100%	—
8.	Staff quarters/Teachers Hostels (Building)	50%	50%
9.	Students Hostels (Building) ..		
	(a) Men's Hostel ..	50%	50%
	(b) Women's Hostel ..	75%	25%
10.	Guest House (Building) ..	50% (Subject to a maximum of Rs. 1,50,000)	50%
11.	Publication grant for publication of learned work by members of staff, doctoral theses and reports of research projects	*Under review*	
12.	Programmes of adult/continuing education	*Under review*	
13.	Establishment of Archival cells in the universities. ..	100%	—
14.	Establishment improvement of university presses (including machinery and equipment only.) ..	50% (subject to a maximum of Rs. 2,00,000)	50%

1	2	3	4
15.	Health Centres		
	(a) non-recurring (building and equipment) (upto Rs. 1,50,000)	75%	25%
	(b) Recurring (salaries of staff) (upto Rs. 30,000 per annum)	50%	50%
16.	Canteen (Building, furniture & equipment) ..	66-2/3%	33-1/3%
17.	Students' aid fund	An amount equal to the collections made by the University for the fund subject to a maximum of Rs. 25,000 per year	
18.	Study centres	100%	—
	Non-recurring		
	Books	Rs. 20,000	
	Stacks	Rs. 10,000	
	Recurring		
	Staff	Rs. 10,000	
	Contingencies (including electricity charges)	Rs. 3,000	
19.	Fellowships*		
	(a) Junior Research Fellowships in Humanities and Sciences, allocated to the universities (Rs. 400 p.m. for first two years and Rs. 500 p.m. for subsequent two years after assessment by interview)	100%	—
	(b) Junior Fellowships to be awarded by UGC (Rs. 400 p.m. for first two years and Rs. 500 p.m. for subsequent two years after assessment by interview)	100%	—
	(c) Senior Fellowships to be awarded by U.G.C. (Rs. 600 p.m.)	100%	—

* Junior Fellowship carries a contingent grant of Rs. 1,500 p.a.
Senior Fellowship carries a contingent grant of Rs. 2,000 p.a.

1	2	3	4
	(d) Research Associateship (to be awarded by U.G.C.) ..	100%	...
20.	Scholarships		
	(a) Scholarships for study in Arabic/ Persian		
	(i) For postgraduate (Rs. 1,800 p.a.)	100%	...
	(ii) For honours (Rs. 1,200 p.a.)	100%	...
	(b) Scholarships for postgraduate studies in Sanskrit/Pali/Prakrit (Rs. 1,800 p.a.)	100%	...
	(c) Scholarships for students of the hill areas of North-East India		
	(i) Junior Research Fellowshps (Rs. 400 p.m.)	100%	...
	(ii) Postgraduate Scholarships (Rs. 1,800 p.a.)	100%	...
21.	National Fellowships ..	100%	...
22.	National Lectureships ..	100%	...
23.	National Associateships (for young research workers from universities and colleges) ..	100%	...
24.	Unassigned grants		
	(a) Exchange of teachers ..	100%	...
	(b) Extension work by university teachers ..	100%	...
	(c) Travel grants to teachers for attending international conferences abroad ..	50%	50%
	(d) Travel grants to scholars/teachers technicians for visiting centres of research or to attend academic conferences/seminars within India	100% (according to university rules)	—
	(e) Computer assistance for buying the time of computer for research work ..	100%	...
	(f) Preparation and development of teaching materials and aids.	100%	...

1	2	3	4
	(g) UGC Unit	100% (ranging from Rs. 10,000 to Rs. 15,000 depending on number of affiliated colleges of the university)	—
25.	Appointment of development officer*	100%	--
26.	College Science/Humanities Improvement Programme. University Leadership Projects Selected Colleges Projects. ..	100%	--
27.	Employment of Trained Coaches	75%	25%

* Only in case of those Universities which have not taken advantage of the scheme in Fourth Plan. The assistance will have to be within the Fifth Plan allocation finally approved for such Universities.

APPENDIX XI

Pattern of Assistance to Colleges for Development of Undergraduate Education

S.No.	Scheme/Project	Pattern of Assistance	
		Contribution by UGC	*Contribution by College/ State Govt.*
1	2	3	4
	(*A*) *General Programmes of Development*		
1.	Extension of building Libraries, laboratories and class rooms including furniture, fittings.	(a) 66.66% (in case of colleges in backward areas)	33.33%
		(b) 50% (in case of colleges in other areas)	50%
2.	Workshops, animal house (including shed)	100%	
3.	(i) Hostels (Men)	75% (in case of colleges in backward areas)	25%
		50% (in case of colleges in other areas)	50%
	(ii) Hostels (Women)	75%	25%
	(iii) Staff Quarters	50%	50%
	(iv) Books and equipment	75%	25%
	* (v) Centenary grants	UGC's assistance upto Rs. One lakh for capital project.	
	(vi) Additional staff	50%	50%
	(*B*) *Student Welfare Programme*		
4*	Health Centres	Under review	

1	2	3	4
5*	**Book banks** Enrolment figures should exclude PUC/Intermediate/Pre-Degree enrolment	*Allocation* (i) A college with a enrolment of 100 or above but less than 250 (ii) A college with a student enrolment of 250 or above but less than 500 (iii) A college with a student enrolment of 500 and above but less than 1000 (iv) A college with a student enrolment of 1000 or above but less than 1500 (v) A college with a student enrolment of 1500 or above but less than 2000 (vi) A college with a student enrolment of 2000 or above	*UGC's Contribution* Rs. 8000 Rs. 10,000 Rs. 15,000 75% of the allocation Rs. 20,000 Rs. 25,000 Rs. 30,000
6.	Canteens/Non-Resident Student Centres (for building as well as furniture and equipment)	*Under review*	
*7.	Student's Aid Fund *Enrolment* 250 or below Between 251–500 Between 501–750 Between 751–1000 Between 1001–1250 Between 1251–1500	*Amount upto* Rs. 750 Rs. 1,000 Rs. 1,750 Rs. 2,250 Rs. 2,750 Rs. 3,250	The Commission's assistance will be subject to the condition that

1	2	3	4
	Between 1501–2000	Rs. 3,750	the college
	Between 2001–2500	Rs. 4,250	raises an equal
	Between 2501 and above	Rs. 5,000	amount
(C)	*Quality Improvement Programmes*		
*8.	Additional staff for diversification of courses, modernisation etc.	50%	50%
*9.	Faculty improvement (Training Programmes, refresher courses, etc)	100%	
*10.	Special Programmes like COSIP, COHSIP, etc.	100%	
*11.	Employment information-cum-advisory bureau and career advising units.	*Under review*	

*Assistance will be provided schemewise separately by the Commission and may not therefore be included in the College Plans.

APPENDIX XII

UGC Subject Panels in Sciences

A. Physics

(including Biophysics, Electronics and Computers)

1. Professor B.M. Udgaonkar
   Tata Institute of Fundamental Research — *Convenor*
   Homi Bhabha Road
   Bombay-5.

2. Professor V. Lakshminarayana
   Department of Nuclear Physics
   Andhra University
   Waltair.

3. Professor M.K. Das Gupta
   Institute of Radiophysics & Electronics
   92 Acharya Prafulla Chandra Road
   Calcutta.

4. Professor A.N. Mitra
   Department of Physics & Astrophysics
   Delhi University
   Delhi.

5. Professor S. Chandrasekhar
   Raman Research Institute
   Bangalore.

6. Professor M.R. Bhiday
   Department of Physics
   Poona University
   Poona.

7. Professor D. Ramachandra Rao
   Department of Physics
   Indian Institute of Technology
   Kanpur.

8. Professor S.K. Joshi
   Physics Department
   Roorkee University
   Roorkee.

9. Professor E.S. Rajagopal
Department of Physics
Indian Institute of Science
Bangalore.

10. Professor D.P. Burma
Department of Biochemistry
Institute of Medical Sciences
Banaras Hindu University
Varanasi.

11. Dr. P.K. Iyengar
Director
Physics Group
Bhabha Atomic Research Centre
Trombay, Bombay-85.

B. CHEMISTRY

1. Professor R.C. Mehrotra
Vice-Chancellor *Convenor*
Delhi University
Delhi.

2. Professor (Mrs.) A. Chatterjee
Department of Pure Chemistry
Calcutta University
92, Acharya Prafulla Chandra Road
Calcutta.

3. Professor R.P. Rastogi
Department of Chemistry
Gorakhpur University
Gorakhpur.

4. Professor R.C. Paul
Vice-Chancellor
Panjab University
Chandigarh

5. Professor H.J. Arnikar
Department of Chemistry
Poona University
Poona.

6. Professor C.N.R. Rao
Department of Chemistry
Indian Institute of Technology
Kanpur.

7. Professor L.K. Ramachandran
Department of Biochemistry
Osmania University
Hyderabad.

8. Professor V.V.S. Murti
Department of Chemistry
Delhi University
Delhi.

9. Professor Salahuddin Ahmed
Department of Chemistry
Aligarh Muslim University
Aligarh.

C. MATHEMATICS

1. Professor K.G. Ramanathan
School of Mathematics
Tata Institute of Fundamental Research
Homi Bhabha Road
Bombay-5. *Convenor*

2. Professor R.P. Bambah
Department of Mathematics
Panjab University
Chandigarh.

3. Professor J.N. Kapur
Indian Institute of Technology
Kanpur.

4. Professor K.B. Athreya
Department of Mathematics
Indian Institute of Science
Bangalore.

5. Professor D.K. Sinha
Department of Applied Mathematics
Jadavpur University
Calcutta-32.

6. Professor M. Venkataraman
Department of Mathematics
Madurai University
Madurai.

7. Professor V.S. Huzurbazar
Department of Mathematics and Statistics
Poona University
Poona.

8. Dr. (Miss) A. George
Department of Statistics
Kerala University
Trivandrum.

D. Biological Sciences

1. Professor A.S. Paintal *Convenor*
Director, Vallabhbhai Patel Chest Institute
Delhi University
Delhi

2. Professor S.C. Maheshwari
Botany Department
Delhi University
Delhi.

3. Professor Sivatosh Mookerjee
School of Life Sciences
Jawaharlal Nehru University
New Delhi.

4. Dr. (Mrs.) Kunthala Jayaraman
Department of Biological Sciences
Madurai University
Madurai.

5. Professor A.K. Sharma
Department of Botany
Calcutta University
35, Bally Gange Circular Road
Calcutta-19.

6. Professor S.N. Kakkar
College of Basic Sciences & Humanities
Haryana Agricultural University
Hissar.

7. Professor O. Siddiqi
Molecular Biology Unit
Tata Institute of Fundamental Research
Homi Bhabha Road
Bombay-5.

8. Professor S.C. Pandeya
Department of Biosciences
Saurashtra University
Rajkot.

E. Geography

1. Professor Moonis Raza — *Convenor*
Centre for the Study of Regional Development
School of Social Sciences
Jawaharlal Nehru University
New Delhi.

2. Professor Manzoor Alam
Department of Geography
Osmania University
Hyderabad.

3. Dr. S.C. Chakravarty
Indian Institute of Management
P.O. Joka,
D.M. Road, 24-Parganas.

4. Professor G.S. Gosal
Department of Geography
Panjab University
Chandigarh.

5. Professor M.S. Honrao
Department of Geography
Karnatak University
Dharwar.

6. Professor C.D. Deshpande
Department of Geography
Bombay University
Bombay.

F. GEOLOGY AND GEOPHYSICS

1. Professor B.G. Deshpande *Convenor*
Department of Geology
Poona University
Poona.

2. Dr. C. Karunakaran
Director General
Geological Survey of India
27, Jawaharlal Nehru Road
Calcutta-13.

3. Professor B.S. Tewari
Centre of Advanced Study in Geology
Panjab University
Chandigarh.

4. Professor U. Aswathanarayana
Departent of Geology
Saugar University
Sagar.

5. Professor V.L.S. Bhimasankaram
Department of Geophysics
Osmania University
Hyderabad.

6. Professor V.K. Gaur
Department of Geology and Geophysics
Roorkee University
Roorkee.

7. Dr. A.K. Saha
Department of Geology
Presidency College
Calcutta.

APPENDIX XIII

Support for Major Research Projects in Sciences

(Status of proposals as on 1.9.1975)

S.No.	Subject	Total No. of research projects received in 1974-75-76	Total No. of projects accepted so far upto 1.9.1975	No. of projects not accepted	No. of projects under consideration by Panels/UGC	No. of projects suggested to be revised & submitted for consideration	Total cost of accepted projects (col. 3) (in Rupees)
1	2	3	4	5	6	7	8
1.	Physics	225	55	28	81	61	40,44,900
2.	Chemistry	259	116	50	84	9	49,21,700
3.	Mathematics	50	17	4	16	13	6,36,300
4.	Earth Sciences	109	24	14	66	5	11,33,700
5.	Biological Sciences (Incl. Anthropology)	317	100	67	96	54	63,41,200
6.	Geography	17	—	—	17	—	—
	Total	977	312	163	360	142	1,70,77,800

APPENDIX XIV

Support for Advanced Research in Humanities and Social Sciences (as on 1.9.1975)

S.No.	Subject	Total no. of research projects received in 1974-75-76	Total no. of projects accepted so far as on 1.9.75	No of projects not accepted	'Proposals' accepted under short term projects	Under Consideration		Total Cost of accepted proposals (in Rupees)
						No. of projects under consideration by panels	No. of projects suggested to be revised & resubmitted for consideration	
1	2	3	4	5	6	7	8	9
1.	Sociology	46	4	22	1	6	4	1,07,000
2.	Law	6	1	2	1	1	1	5,000
3.	Political Science	30	6	15	—	2	5	99,000
4.	Psychology	28	4	14	—	5	—	97,500
5.	Economics/Commerce	48	9	24	1	1	—	3,24,300
6.	History	49	13	11	4	5	1	2,54,500
7.	Philosophy	11	4	5	—	1	—	34,000
8.	Linguistics/Classical Languages	67	6	44	1	4	3	1,09,000
9.	Modern Indian Languages	31	8	7	2	6	—	2,01,900
10.	Education	14	3	6	2	2	1	1,77,998
11.	English	4	—	4	—	—	—	—
12.	Social Work	1	—	—	—	—	1	—
	Total	335	58	154*	12	33	16	14,10,198

* 62 Proposals were considered by the panels in their Second and Third Meetings.

APPENDIX XV

Centres of Advanced Study in Humanities and Social Sciences

S.No.	Subject	Area of Specialisation	Department	Year of recognition
1.	Economics	Public Finance and Industrial Economics	Department of Economics, Bombay University	1963
2.	Economics	Economics of Development and Economic History	Department of Economics, Delhi University	1963
3.	Economics	Agricultural Economics	Gokhale Institute of Politics and Economics, University of Poona	1963
4.	Philosophy	Advaita and Allied Systems of Philosophy	Department of Philosophy, Madras University	1964
5.	Sanskrit	Sanskrit Literature	Department of Sanskrit, Poona University	1964
6	Linguistics	Dravidian Linguistics	Department of Linguistics, Annamalai University	1963
7.	Education	Educational Research	Department of Education, M.S. University, Baroda	1963
8.	History	Medieval Indian History	Department of History, Aligarh Muslim University	1968
9.	Sociology	Sociology	Department of Sociology, University of Delhi	1968

APPENDIX XVI

Centres of Advanced Study in Science

S.No.	Subject	Area of Specialisation	Department	Year of recognition
1	2	3	4	5
1.	Physics	Theoretical Physics and Astrophysics	Department of Physics & Astrophysics, Delhi University	1963
2.	Physics	Radiophysics & Electronics	Institute of Radiophysics & Electronics Calcutta University	1963
3.	Chemistry	Chemistry of Textile Fibres and Dyes	Department of Chemical Technology Bombay University	1963
4.	Chemistry	Chemistry of Natural Products	Department of Chemistry Delhi University	1963
5.	Botany	Plant Morphology and Embryology	Department of Botany Delhi University	1963
6.	Botany	Plant Pathology and Mycology	Department of Botany University of Madras	1963
7.	Zoology	Cell Biology and Endocrinology	Department of Zoology, Delhi University	1963
8.	Zoology	Marine Biology	Department of Marine Biology, Annamalai University	1963
9.	Geology	Himalayan Geology and Palaeontology	Department of Geology, Panjab University	1963
10.	Mathematics	Pure Mathematics	Department of Mathematics, Bombay University (in collaboration with the Tata Institute of Fundamental Research Bombay)	1963

Appendix XVI *(Contd.)*

1	2	3	4	5
11.	Mathematics	Pure Mathematics	Department of Mathematics, Panjab University	1963
12.	Mathematics	Pure Mathematics	Department of Mathematics, University of Madras and Ramanujan Institute of Mathematics, Madras	1967
13.	Astronomy	Experimental Astronomy	Department of Astronomy and Niazmia Observatory, Osmania University, Hyderabad	1964
14.	Biochemistry	Proteins, Lipids, Vitamins	Department of Biochemistry, Indian Institute of Science, Bangalore	1968

APPENDIX XVII

UGC Subject Panels in Humanities and Social Sciences

A. Social Work

1. Dr. M.S. Gore — *Convenor*
   Director
   Tata Institute of Social Science
   Sion, Trombay Road,
   Deonar, Bombay.

2. Dr. S.N. Ranade
   Director
   Delhi School of Social Work
   Delhi University
   Delhi.

3. Professor (Miss.) I.M. Patel
   Faculty of Social Work
   M.S. University
   Baroda.

4. Mr. K.N. George
   Director
   Madras School of Social Work
   Madras.

5. Professor S.Z. Hasan
   Department of Social Work
   Lucknow University
   Lucknow.

6. Dr. A.B. Bose,
   Director (PREM),
   Department of Social Welfare
   Ministry of Education & Social Welfare,
   New Delhi.

B. Teacher Education

1. Professor M.V. Mathur* — *Convenor*
   Director-General
   National Council for Applied Economic Research
   New Delhi.

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* Presently Director, National Staff College for Educational Planning and Administration, New Delhi.

2. Shri I.J. Patel
   Vice-Chancellor
   Gujarat University
   Ahmedabad.

3. Dr. S.K. Mitra
   Joint-Director
   N.C.E.R.T.
   New Delhi.

4. Professor S.B. Adaval
   Department of Education
   Allahabad University
   Allahabad.

5. Professor Vedamani Manual
   Department of Education
   Kerala University.

6. Professor R. Rath
   Department of Psychology
   Utkal University
   Bhubaneswar.

7. Dr. P.R. Panchamukhi
   Department of Economics
   Bombay University
   Bombay.

8. Dr. (Miss) Suma Chitnis
   Department of Sociology
   Tata Institute of Social Sciences
   Bombay.

9. Miss Shakuntala Mehta
   Department of Education
   S.N.D.T. Women's University
   Bombay.

C. Economics

1. Professor D.T. Lakdawala — *Convenor*
   Department of Economics
   Bombay University
   Bombay.

2. Dr. V.M. Dendekar
Director
Gokhale Institute of Economics
and Politics
Poona.

3. Dr. Y.K. Alagh
Director
Sardar Patel Institute of Economic & Social Research
Navarangapura
Ahmedabad.

4. Professor H.K. Manmohan Singh
Department of Economics
Punjabi University
Patiala.

5. Professor V.B. Singh
Department of Economics
Lucknow University
Lucknow.

6. Dr. K.N. Raj
Director
Centre for Economic and Social Change
Trivandrum.

7. Professor S. Chakravarty
Member
Planning Commission
New Delhi.

8. Dr. A.M. Khusro
Vice-Chancellor
Aligarh Muslim University
Aligarh.

D. Sociology and Social Anthropology

1. Professor Yogendra Singh
Chairman *Convenor*
Centre for the Study of Social System
Jawaharlal Nehru University
New Delhi.

2. Professor S.C. Dube
Director
Indian Institute of Advanced Study
Simla.

3. Dr. (Miss) Tara Patel
University School of Social Services
Gujarat University
Ahmedabad.

4. Professor L.P. Vidyarthi
Department of Anthropology
Ranchi University
Ranchi.

5. Dr. (Smt.) Neera A. Desai
Department of Sociology
S.N.D.T. College for Women
Bombay.

6. Professor Andre Beteille
Department of Sociology
Delhi University
Delhi.

7. Professor Victor S. D' Souza
Department of Sociology
Panjab University
Chandigarh.

8. Professor Y.B. Damle
Department of Sociology
Poona University
Poona.

9. Professor T.K. Unnithan
Department of Sociology
Rajasthan University
Jaipur

10. Professor T.N. Madan
Institute of Economic Growth
Delhi.

E. Political Science

1. Professor Iqbal Narain — *Convenor*
   Department of Political Science
   Rajasthan University
   Jaipur.

2. Professor Rasheeduddin Khan
   Centre for Social Studies
   Jawaharlal Nehru University
   New Delhi.

3. Professor (Km.) A.J. Dastur
   Deparment of Political Science
   Bombay University
   Bombay.

4. Professor V.M. Sirsikar
   Department of Political Science
   Poona University
   Poona.

5. Professor S.K. Mukherjee
   Department of Political Science
   Calcutta University
   Calcutta.

6. Professor Randhir Singh
   Department of Political Science
   Delhi University
   Delhi.

7. Professor A.D. Pant
   Department of Political Science
   Allahabad University
   Allahabad.

8. Professor C. Arunachalperumal
   Department of Political Science
   Madras University
   Madras-5.

F. LINGUISTICS

1. Professor P.B. Pandit — *Convenor*
   Department of Linguistics
   Delhi University
   Delhi.

2. Dr. D.P. Pattanayak
   Director
   Central Institute of Indian Languages
   Mysore.

3. Professor Ramesh Mohan
   Director
   Central Institute of English and Foreign Languages
   Hyderabad.

4. Professor V.I. Subramaniam
   Department of Linguistics
   Kerala University
   Trivandrum.

5. Professor H.L. Sharma
   Department of Hindi
   Aligarh Muslim University
   Aligarh.

6. Dr. R.K. Das Gupta
   Professor of Modern Indian Languages
   Delhi University
   Delhi.

7. Professor T.G. Meinkar
   Department of Sanskrit
   Bombay University.
   (University Club House)
   Bombay.

8. Professor K.M. Tiwary
   Department of English
   Patna University
   Patna.

9. Professor Nazir Husain
   Department of Persian
   Aligarh Muslim University
   Aligarh.

G. Psychology

1. Professor R. Ratn — *Convenor*
   Department of Psychology
   Utkal University
   Bhubaneshwar.

2. Professor Durganand Sinha
   Department of Psychol gy
   Allahabad University
   Allahabad.

3. Professor Anwar Ansari
   Department of Psychology
   Aligarh Muslim University
   Aligarh.

4. Professor Udai Pareek
   Department of Organisational Behaviour
   Indian Institute of Managament
   Vastrapur
   Ahmedabad.

5. Professor E.I. George
   Department of Psychology
   Kerala University
   Trivandrum.

6. Professor S.M. Mohsin
   Department of Psychology
   Patna University
   Patna.

H. History

1. Professor Satish Chandra* — *Convenor*
   Vice-Chairman
   University Grants Commission
   New Delhi.

2. Professor R.S. Sharma
   Department of History
   University of Delhi
   Delhi.

* Presently Chairman, University Grants Commission

3. Professor B.B. Lal
Department of History
Jiwaji University
Gwalior.

4. Professor S.C. Misra
Depatrment of History
M.S. University
Baroda.

5. Professor S. Gopal
Centre for Historical Studies
Jawaharlal Nehru University
New Delhi.

6. Professor N. Subrahmanian
Department of Ancient History
Madurai University
Madurai.

I. Philosophy

1. Professor K. Satchidananda Murty* — *Convenor*
Department of Philosophy
Andhra University
Waltair.

2. Professor Daya Krishna
Department of Philosophy
Rajasthan University
Jaipur.

3. Professor N.K. Devaraja
Department of Philosophy
Banaras Hindu University
Varanasi.

4. Professor S. Bhattacharya
Visiting Fellow
Indian Institute of Advanced Study
Simla.

* Presently Vice-Chancellor, S V. University, Tirupati.

5. Professor K.J. Shah
Department of Philosophy
Karnatak University
Dharwar.

6. Professor R.C. Pandeya
Department of Philosophy
Delhi University
Delhi.

J. LAW

1. Professor G.S. Sharma *Convenor*
Department of Law
Rajasthan University
Jaipur.

2. Professor P.K. Irani
Department of Law
Bombay University
Bombay-32.

3. Professor R.C. Hingorani
Department of Law
Patna University
Patna.

4. Professor Upendra Baxi
Department of Law
Delhi Uuniversity
Delhi.

5. Professor B.S. Murthy
Department of Law
Andhra University
Waltair.

6. Professor Indra Deva
Department of Sociology
Ravi Shankar University
Raipur.

7. Mr. Justice Prakash Narain
   Judge
   Delhi High Court
   Delhi.

8. Dr. P.K. Tripathi
   Member
   Law Commission
   New Delhi.

9. Professor A.T. Madan
   Department of Law
   Cochin University
   Cochin.

APPENDIX XVIII

Computer Facilities available in the Universities in 1974-75

S.No.	*University*	*Type of Computer*
1.	Aligarh Muslim University	IBM—1130
2.	Andhra University	IBM—1130
3.	Banaras Hindu University	TDC—12
4.	Bombay University	IBM—1620
5.	Calcutta University	IBM—1130
6.	Delhi University	IBM—1620; IBM—360
7.	Gujarat University	IBM—1620
8.	Jawaharlal Nehru University	R—1020
9.	Jodhpur University	TDC—12
10.	Karnatak University	TDC—12
11.	Kurukshetra University	TDC—316
12.	Madras University	IBM—1130
13.	Osmania University	TDC—12
14.	Panjab University	IBM—1620
15.	Roorkee University	TDC—12
16.	Sardar Patel University	IBM—1620
17.	Utkal University	IBM—1130
18.	Birla Institute of Technology & Science	IBM—1130
19.	Indian Institute of Science	IBM—360